EDUCATION

American VOCATIONAL Journal

MARCH 1960

STRUCTION TECHNIQUES UNDERSTANDING

GOALS OF DISTRIBUTIVE EDUCATION

●

To Offer Instruction in Distribution and Marketing

To Aid in Improving the Techniques of Distribution

To Develop an Understanding of the Social and Economic Responsibilities of Those Engaged in Distribution in a Free Competitive Society

DISTRIBUTIVE EDUCATION CLUBS OF AMERICA

Be sure r You" page 17

RC WENRICH 07565
UNIVERSITY OF MICHIGAN
ANN ARBOR MICH

J. J. Gnatek, Metals Instructor
West Leyden High School
Northlake, Illinois

"...South Bend Lathes require a minimum of maintenance..."

"The reason our school uses South Bend Lathes is that I believe they are best for our purpose," said Mr. Gnatek. "The machines are rugged and precision built. The name assures quality. No machine is completely enduring against the inquiring experimenting abuses delivered by the high school student. I have found through experience that South Bend Lathes require a minimum of maintenance, and when adjustments must be made the component parts are easily accessible. The price is right, too."

For over a half-century instructors have strongly praised South Bend Lathes for vocational training. Let us tell you why this has been justified . . . just mail the coupon.

SOUTH BEND LATHE, Inc.
SOUTH BEND 22, INDIANA
Builders of lathes, milling machines, shapers, drill presses, pedestal grinders

SOUTH BEND LATHE

SOUTH BEND LATHE, Inc., South Bend 22, Indiana
Please send complete information on South Bend Lathes.

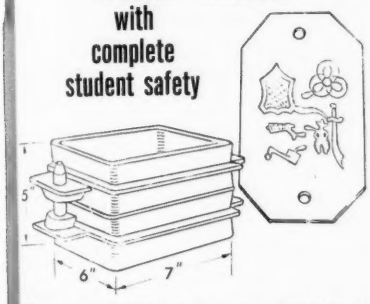
NAME_____

SCHOOL_____

STREET_____

CITY & ZONE_____ STATE_____

New Kit
FOR TEACHING FOUNDRY METHODS with complete student safety



This new Foundry Kit uses Cerrobend* Alloy in making duplicate patterns for the matchplate. Cerrobend Alloy melts at 158°F., much lower than other metals sometimes used for the same purpose. Cerrobend Alloy's low melting temperature (below boiling water) eliminates all danger of explosion when pouring into wet sand molds. Cerrobend Alloy is one of several Cerro Alloys that are widely used in commercial foundries for duplicating master patterns, anchoring patterns in matchplates, producing patterns compensated for shrinkage, metallizing wood patterns and core boxes, and other tasks. Write today for further information regarding the new Foundry Kit.

*T.M. Cerro de Pasco Corporation

CDP

CERRO DE PASCO SALES CORPORATION
Room 1513, 300 Park Ave., New York 22, N. Y.

AMERICAN FORESTS LACK ADEQUATE ATTENTION

America's forests deserve much more attention than they are getting from science, two speakers at the recent 73rd annual meeting of the American Association of Land Grant Colleges and State Universities.

The need for lumber and other wood products is going up steadily, reported Dean F. E. Price of Oregon State College.

So are the pressures on America's forests to produce wildlife, provide recreation, store water, and furnish grazing for livestock.

These needs can only be met by research, Dean Price warned. "Past modest efforts in forestry research are now clearly inadequate."

Watershed management is one of the most critical forest research needs, according to V. L. Harper, assistant chief of the U. S. Forest Service.

Water yields and water-holding capacity can be increased, especially in higher-elevation forests, Harper explained. Another task for science is to find ways to protect forest watersheds from the pressures of logging and grazing and to restore damaged or worn-out watersheds.

Breeding better trees is another challenge to the forest research worker, Harper said.

"We have scarcely scratched the surface in forest genetics," he reported. "A great potential exists for faster growth rates, better wood quality, and other characteristics that can be bred into our commercial tree species."

Harper sees great promise in new approaches to forest insect and disease control. He mentioned efforts to breed more resistant strains of trees, and also the use of systemic insecticides which work within the tree to "bite back" at attacking insects.

In developing new forest products, much has already been accomplished. Harper urged further work on plywoods, veneer, and laminated or modified wood forms.

JUST PUBLISHED . . . NEW EDITIONS OF TWO OUTSTANDING INDUSTRIAL EDUCATION TEXTS

How to Design and Install Plumbing-Fourth Edition

A. J. Matthias, Jr. and Esles Smith, Sr.

This comprehensive guide to the plumbing trade now includes the newest concepts in plumbing design and installation. Features the Illustrative Example, which covers the complete design and installation of plumbing in a modern, six-room residence. 480 pages. $4.95

Machine Shop Operations and Setups-Second Edition

H. W. Porter, C. H. Lawshe and O. D. Lascoe

New, widely-used operations have been incorporated into this new edition, and full coverage has been accorded to new cutting tools and methods. Particularly important for modern machinist training are the new sections on the machinability and heat-treatment of metals. 397 pages. $5.50

Send for On-Approval Copies!

AMERICAN TECHNICAL SOCIETY
Dept. W 390
848 E. 58th St., Chicago 37, Ill.

WORTH LOOKING INTO

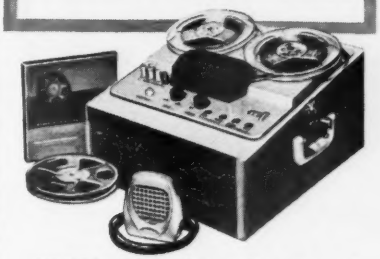
Our new illustrated catalog showing all kinds of **CRAFT METALS**—silver, copper, brass, pewter, aluminum, gold.
FINE TOOLS—jewelry making and metalsmithing
JEWELRY FINDINGS—sterling, gold filled, copper, nickel.
ENAMELING SUPPLIES — copper and silver shapes, domestic and imported enamels, kilns, tools, foil, etc.
Also useful information on soldering, use of tools, metals, etc. Illustrations of new MOUNTINGS FOR BAROQUE STONES and a list of over 40 varieties of tumble polished stones available. Prompt service is our specialty. An order placed with us assures immediate delivery with an understanding for the needs of schools and craftsmen. One order will convince you. Send for FREE CATALOG and price list today.

C. R. HILL COMPANY
35 West Grand River Detroit 26, Michigan

Ceramics-Mosaic Copper Enameling

Your complete source of materials and equipment. Fully illustrated NEW
#6 INSTRUCTIVE CATALOG
FREE if requested on letterhead
(Wholesale to Public Institutions)
TEPPING STUDIO SUPPLY CO.
professional staff
3517 Riverside Dr., Dayton 5, Ohio

ALLIED's BEST BUYS in TAPE RECORDING and ELECTRONIC TRAINING AIDS

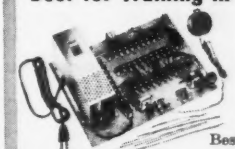


KNIGHT® Dual-Track 2-Speed Top Value Tape Recorder

ONLY **$99.95** $5 down

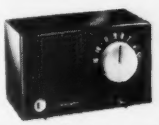
Features push-button automatic control for instant selection of Record, Play, Rewind, Forward and Stop at either 7½ or 3¾ ips speeds. Includes digital index counter; safety interlock to prevent accidental erasure; separate tone and volume controls; recording level indicator. Records from mike, radio, TV or phono. Built-in 5-watt amplifier and 4 x 6" speaker for remarkably faithful quality. Easy to operate. Compact—only 30 lbs. Complete with microphone, 5" reel of tape and 7" take-up reel. An exclusive Allied product—unbeatable for value.
92 RU 725. *$5.00 Down.* Net..... **$99.95**

ALLIED'S *knight-kits*® Best for Training in Electronics



12-in-One Electronic Lab Kit only **$14.95**

Best, broad-coverage electronics teaching aid. Includes 12 circuits, from simple receiver to electronic timer. Components, once mounted, remain in place and last indefinitely; circuit changes are made by changing jumper wires.
83 Y 272. 12-in-1 Kit. Only..... **$14.95**



"Ranger" AC-DC Radio Kit only **$16.95**

Thousands in use in shop training. Teaches amplification, oscillation, rectification, conversion, etc. Complete with cabinet.
83 Y 736. "Ranger" Radio. Only..... **$16.95**

FREE ALLIED'S 1960 CATALOG

Your buying guide to everything in electronics for the school: sound and recording equipment; Knight-Kits for training; lab instruments, tools, books, electronic parts. Write for free copy today.

ALLIED RADIO

ALLIED RADIO, Dept. 19S-C
100 N. Western Ave., Chicago 80, Ill.
Ship the following: ☐ 92 RU 725.
☐ 83 Y 272. ☐ 83 Y 736. $_____ enclosed.
☐ Send FREE 1960 ALLIED Catalog
Name_____
Address_____
City_____ Zone____ State_____

VOCATIONAL-TECHNICAL EDUCATION

Eight-week term—June 20 through August 12. Basic courses and advanced seminars. Trade experience evaluated by examination applicable toward baccalaureate degree in Trade and Industrial Education.

Special two-week workshops—June 20 through July 1. Special workshops in Cosmetology, Automotive, and Shop and Laboratory design and layout.

INDUSTRIAL ARTS EDUCATION

Eight-week term—June 20 through August 12. Technical and professional courses for undergraduates and graduates. Special leaflet sent on request.

HOME ECONOMICS EDUCATION

Six-week term—June 20 through July 29. Courses in evaluation of instruction, methods in teaching, and organization and administration of homemaking education.

Special two-week workshop—June 20 through July 1. Special workshop in homemaking curriculum development.

BUSINESS EDUCATION

Eight-week term—June 20 through August 12. Courses in Secretarial practices, Office procedures, shorthand, and typing.

Special two-week workshop—June 20 through July 1. Special workshop in Briefhand.

Graduate programs. Graduate major or Master's level — thesis optional. Minor work on Doctoral level.

For early receipt of Catalogs and detailed information write directly to Industrial Education Department, Room D8,

OREGON STATE COLLEGE
Corvallis, Oregon
Authorized by the OREGON STATE BOARD OF HIGHER EDUCATION

LOOK TO GARRETT FOR THE FINEST QUALITY DRAWING TABLES AND SEATING DESIGNED FOR VOCATIONAL EDUCATION DEPARTMENTS!

OTHER MODELS AVAILABLE
LARGE 24 x 24" ADJUSTABLE DRAWING BOARD
BUILT ON TABORET!
WELDED TUBULAR STEEL CONSTRUCTION
AC-440
OVER 25 MODELS OF CHAIRS AND STOOLS AVAILABLE EQUIPPED WITH THE EXCLUSIVE AUTOMATIC "LIFT-LOK"
Full 8" height adj.
C-1624
ALL NEW E-Z PORTABLE DRAWING BOARD. COMPLETELY FOLDS AND ADJUSTS TO ANY POSITION FROM VERTICLE TO HORIZONTAL. AN ECONOMY BOARD OF HIGH QUALITY.

WRITE FOR INFORMATION AND PRICE LIST.

GARRETT TUBULAR PRODUCTS, INC.
P.O. BOX 237 GARRETT, INDIANA

From the Public Information Committee

National Conventions of School Administrators Recognize Vocational Education. The American Association of School Administrators, meeting at Atlantic City in February, provided a panel on "Trends in Vocational Education" with Dr. Lynn Emerson of Cornell University as the principal speaker and seven panelists. Adin Hester, President of the Future Farmers of America, was bracketed with Dr. James G. Conant, G. Keith Funston, President of the New York Stock Exchange, and four others, as a featured speaker at the February convention of the National Association of Secondary School Principals at Portland, Oregon. It is perhaps more than coincidental that the AVA Committee on Public Information established liaison with both of these groups during 1959.

Sears-Roebuck Grant to Public Information Committee Renewed. The Sears-Roebuck Foundation, which provided $4,000 for the work of the Committee on Public Information in 1959, has set aside an additional $4,000 for 1960. Since approximately $2,000 of the funds for 1959 were set aside for publications in process, the Committee will have about $6,000 for 1960. The AVA office at Washington is now distributing 20,000 copies of each of the first two publications of the Committee: "Occupational Distribution in Relation to Educational Planning" by Dr. H. H. London of the University of Missouri and "New Developments in Industrial and Industrial Arts Education" by J. F. Ingram, Supervisor of Trade and Industrial Education in Alabama.

Organizing Public Opinion for Action in Providing Post-High-School Vocational and Technical Education. The most promising new educational front is in the development of noncollegiate institutions and programs for education beyond the high school. These seem sure to come in one form or another. It is important that vocational and technical education have their proper place in them.

Vocational educators may not realize fully the allies they may have in pressing for vocational and technical education in post-high-school institutions. The help of all of them will be needed. Business and industry are obvious allies. It may not be so obvious that those in the colleges and secondary schools are potential allies.

The colleges are struggling to maintain their status as true institutions of higher learning as they face the flood of high school graduates seeking more extended schooling. Many of these graduates are turning to the colleges because they have no alternative. Many who come to college do not find there what they need. Nationally, about 60 per cent of those who enter college are eliminated or withdraw, half of them by the end of their first year in college. Schools providing technical education are recognized increasingly by college people as boons to the colleges.

The secondary school people have been especially harassed in recent years. They are pressed to give increasing amounts of time to general education. They are embarrassed because the "vocational education" they provide is often not truly vocational because of conditions beyond their control, and because of the immaturity and occupational indecision of most high school students, the frequent lack of time and a correct environment for rigorous vocational education, the difficulty in getting adequate funds for an unusually expensive program. Many of them would wel-

(Continued on page 7)

American VOCATIONAL Journal

VOLUME 35, NUMBER 3 • MARCH 1960

M. D. MOBLEY,
Editor-in-Chief

DOROTHY ROBINSON THOMPSON,
Managing Editor

ELEANOR BROOKE,
Editorial Assistant

AVA EDITORIAL BOARD

Agriculture: GEORGE P. DEYOE
University of Illinois

Business: WILLIAM SELDEN
Pennsylvania Department of Public Instruction

Distributive: EDWIN NELSON
Iowa State Department of Education

Home Economics: DOROTHY LAWSON
New York State Education Department

Industrial Arts: G. HAROLD SILVIUS
Wayne State University, Detroit

Trade & Industrial: RUSSELL K. BRITTON
Denver Board of Education

NATIONAL ADVERTISING REPRESENTATIVES

EUGENE L. POLLOCK
60 E. 42nd St. New York 17, N. Y.

AVA OFFICERS

President: E. M. CLAUDE
Springfield, Ill.

Past President: H. H. LONDON
Columbia, Mo.

Executive Secretary: M.D. MOBLEY
1010 Vermont Ave., N. W. Washington, D. C.

Treasurer: CHARLES W. SYLVESTER
6429 Blenheim Rd., Baltimore

VICE PRESIDENTS

Agriculture: CARL M. HUMPHREY
Jefferson City, Mo.

Distributive: LOUISE BERNARD
Richmond, Va.

Home Economics: MRS. ROSA H. LOVING
Richmond, Va.

Industrial Arts: JOHN A. JARVIS
Menomonie, Wis.

Trade and Industrial: F. J. KONECNY
College Station, Tex.

The American Vocational Journal is published monthly, September to May, inclusive, by the American Vocational Association, Inc. Second class postage paid at Washington, D. C.

Contents copyright by AVA.

5

All members of the American Vocational Association, Inc., receive the Journal; 25 per cent or more of membership dues reserved for Journal. Membership applications should be submitted through state vocational association secretaries. Order library and non-member subscriptions at $3.00 a year from AVA, 1010 Vermont Ave., N. W., Washington.

THE JOURNAL FOR MARCH

Specials

AVA Program of Work ---- 8

Vocational Education Outlook for the 60's ---- *Dr. M. D. Mobley* 9

The Area Vocational Program Boom in North Carolina ---- *A. Wade Martin* 12

Projects—or What? ---- *Dr. Roy G. Fales and Dr. Roy V. Orendorf* 14

Letting the People Know ---- *Dr. H. M. Hamlin* 15

"Thank Heaven for You!" ---- *W. E. Sturges* 17

The Challenge of the 60's ---- *Dr. H. H. London* 20

Kansas School Administrators Take a Look at Vocational Education ---- *R. J. Agan* 23

Report of the Executive Secretary ---- *Dr. M. D. Mobley* 25

Index to Volume 34 ---- 28

Regulars

From the Public Information Committee ---- *Dr. H. M. Hamlin* 2

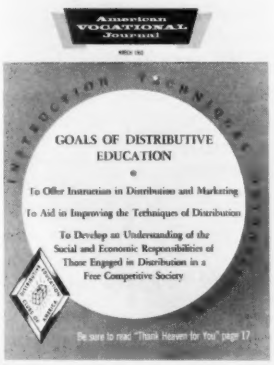
Applause ---- 4

Latest Word from Washington ---- *Dr. M. D. Mobley* 5

From the U. S. Office ---- 29

Associations and People ---- 30

New Books ---- 32


American VOCATIONAL Journal
GOALS OF DISTRIBUTIVE EDUCATION
To Offer Instruction in Distribution and Marketing
To Aid in Improving the Techniques of Distribution
To Develop an Understanding of the Social and Economic Responsibilities of Those Engaged in Distribution in a Free Competitive Society
Be sure to read "Thank Heaven for You" page 17

THE COVER: This month, we call your special attention to the recently-stated goals of distributive education, thus honoring the dedicated men and women who prepare huge forces of American youth and adults for useful roles in the nation's vast network of distribution. Be sure to read "Thank Heaven for You" (page 17) —a top retailer's tribute to the successful achievements of vocational education and, particularly, distributive education. Reprints will be available later through the courtesy of the Variety Stores Association.

SUMMER SCHOOL IN COLORADO
at a School Recognized as a Leader in:

- Guidance and Counseling
- Industrial Arts Education
- Physical Education
- Psychology
- School Administration
- Vocational Education — All Services
- Administration and Supervision of Vocational Education
- Supporting Courses in Major Academic Areas

* * *

TWO WEEK TERM: June 6-17
FIRST FOUR WEEK TERM: June 20-July 15
SECOND FOUR WEEK TERM: July 18-Aug. 12

VISIT

Central City Opera • Red Rocks Amphitheater
Cheyenne Frontier Days • Many Scenic Wonders

COMBINE A VACATION
AND A PRACTICAL EDUCATION
AT A MILE HIGH LEVEL

Address Correspondence to:

DEAN OF SUMMER SESSION

COLORADO STATE UNIVERSITY

FORT COLLINS, COLORADO

McKnight's NEW

SHOP BOOK CATALOG

FREE

BOOKS ON MANY SUBJECTS

- Leathercraft
- Silk Screen
- Ceramics
- Linoleum Block Printing
- Metalwork
- Woodworking
- Photography
- Wood carving
- Plastics
- Weaving
- Bookbinding
- Auto Mechanics (New)
- Electronics (New)
- Fabric Decoration

"TELL HOW" and "SHOW HOW"
BOOKS MAKE TEACHING
EASIER AND MORE EFFECTIVE

America's most popular shop and project books for school use. New catalog gives complete listing of these interesting, easy-to-read and understand books, all profusely illustrated with "hands at work" photos and drawings.

CLIP THIS COUPON

McKnight & McKnight Publishing Co.
Dept. 720, Bloomington, Illinois
Send me your big, new catalog today!

Name .....
School .....
Address .....
City ..... *State* .....

Applause

—to the Industrial Arts Tip Sheet, Vol X, No. 2, for the thoughtful editorial which is quoted from here.

This publication is a cooperative project sponsored by the West Virginia Industrial Arts Association, industrial arts teachers, and the trade and industrial education service, West Virginia State Department of Vocational Education. Ronald B. Thomas is Editor.

"A little more than two years ago the Russians threw the United States into a state of panic with her 'Sputnik'. To a great extent, this panic still persists. Since 'Sputnik' was the result of tremendous technological advances, the American public immediately began to look toward our educational pattern to see if the cause of our own backwardness might lie there. Big names in American education began surveying the school scene and in their published articles have uncovered an amazing amount of factual evidence concerning the waste of intellectual manpower which is going on in our schools. Our government and numerous private organizations have embarked on a massive program to rectify some of the more obvious errors in the national educational program. The emphasis seems to be placed on increased concentration in the sciences, mathematics, and languages . . .

"Students of industrial arts are beginning to wonder how this emphasis will affect the industrial arts programs in today's and tomorrow's high schools. Some have become more than a little concerned over the possibility of shop programs being dropped with a consequent lessening demand for industrial arts instructors. We must not view this possibility with the same panic which the country experienced two years ago. Rather, we must look upon it as the challenge which it is. In our school shops we can expand our horizons in such a way that our students will take a greater interest in subjects such as physical science, chemistry and mathematics. By utilizing the inherent characteristics of an Industrial Arts shop, subjects of this kind can be made to take on more meaning . . .

"Take for instance the article in the October AMERICAN VOCATIONAL JOURNAL. Here is a concrete example where the desire of a group of boys to build a rocket in the school shop led to many hours of 'midnight oil' research in science and mathematics. These students had to utilize the skills they had developed in the school shop and had to develop many more which were above the usual pattern. The success of their launching was confirmation that they had learned all of their lessons well.

"Much science equipment for specialized experiments will be made by the industrial arts students, who will use it during their science laboratory periods. The contribution of the industrial arts shop toward the mastery of electrical and electronic know-how cannot be equaled anywhere else in the school. . . .

"Throughout all of this there is one thing which the industrial arts instructor must keep in mind. He no longer can be a person unto himself. He cannot stay in his 'hole in the basement' and become a part of this very necessary pattern of school development. He is trained to teach children—not merely subject matter. If the demands of an endeavor cross the boundary of the classroom he should be—must be—the first to take the step. This is his opportunity, and it is smack dab in his own backyard."

Latest Word from Washington

ROUNDUP OF NEWS FROM AVA HEADQUARTERS. Featured in this issue of the JOURNAL is AVA's program of work for 1960 (page 8) which already has been reprinted for distribution at regional meetings throughout the nation. This material deserves the careful attention of all AVA members who should enthusiastically join with their colleagues in efforts to bring fulfillment to each one of their professional organization's current goals.

The official list of AVA Committees will appear in the next issue. We salute the men and women of vocational and practical arts education who serve and have served their Association with dedicated purpose as responsible members of many committees and especially-appointed groups within AVA. These are the people who have brought life to many of AVA's long-range projects; they have solved problems—often, of magnitude; they have provided leadership and direction in blazing new trails of progress; they have brought the essence of true professionalism to the grass roots of their nation. It is a pleasure to pause here to say THANK YOU to each one of them.

These people and state association officers—who also deserve wide recognition for outstanding service to AVA and their profession—will be interested to know that the headquarters office now has available charts that detail AVA's organizational structure. A copy of this chart is being sent to each officer for his use and study. Designed for use in membership promotion campaigns at state and local levels (and related purposes), additional single copies of the chart are available from the AVA office upon request.

We would like to call the attention of JOURNAL readers to a new committee that has been appointed to promote AVA activity in the publication of significant research findings. Headed by Dr. Rupert Evans of the University of Illinois, the Committee on Research will develop materials of unique value for production by the Committee on Publications which is chaired by Gilbert G. Weaver of New York.

These groups will also work closely with the AVA Public Information Committee—headed by Dr. H. M. Hamlin of Illinois—in an all-out campaign to bring the purpose, the philosophy and the functions of vocational and practical arts education to the attention of the uninformed. As materials are produced, announcements will appear in the JOURNAL for the full information of all AVA members.

AVA members everywhere have already offered powerful impetus to their Association's newly-launched program of "letting the people know." In response to announcements that reprints of Dr. James B. Conant's "Vocational Education and the National Need" (January, 1960, JOURNAL) are available at cost, they have ordered in excess of 30,000 copies for distribution to school board members, general education personnel, PTA officers and leaders in other organizations that are perhaps unacquainted with the need for the further promotion and development of vocational education.

For similar distribution purposes, they have also ordered more than 15,000 reprints of the 1959 AVA Convention address of U. S. Secretary of Labor James P. Mitchell—also published in the January JOURNAL.

This is the type of membership action and support that has fostered the growth and character of AVA as a national organization of impressive prestige and influence. We

thank you for it as we remind you that the future of AVA and vocational and practical arts education is in your hands.

RUSSIAN VOCATIONAL OFFICIALS completed on Feb. 20 a two-week tour of the United States for the purpose of studying vocational programs in New York, St. Louis, Chicago, Milwaukee, Washington, Mo., and Waukesha, Wis. Dr. H. H. London, immediate Past President of the AVA, accompanied the Russians on their entire tour, which was sponsored by the Department of State as an exchange program.

Three Americans will visit Russia sometime during April or May to study Soviet programs of vocational education, which, according to all reports, are now in the process of being greatly expanded. AVA was asked by the U. S. Department of State to cooperate in sponsoring this exchange program with the Russians. We are sure that the American vocational officials will be able to bring back from Russia factual information regarding their programs. This will be in keeping with one of the resolutions approved by the House of Delegates at the recent AVA Chicago Convention. It is our plan to publish these facts in forthcoming issues of the JOURNAL.

APPROPRIATIONS. As we go to press hearings on appropriations for fiscal 1961 are in progress before both the House and Senate Subcommittees that handle vocational appropriations. It is too early to predict the outcome. We do know that many vocational teachers and officials throughout the nation have written members of National Congress urging that no cut be made in the appropriation for Title I of the George-Barden Act. We have also talked with several members of Congress. They have all assured us that they will vigorously oppose the proposed $2 million cut in Title I — George-Barden funds.

PRACTICAL NURSE MEASURE. Senator Lister Hill (D), Alabama, has introduced a bill (S. 3025) to amend the practical nurse act (P. L. 911). The amendments call for (1) extending the authorization for appropriations for practical nurse training for four additional years—until June 30, 1965; (2) eliminating, wherever it appears, the language "to extend and improve" which restricts use of funds for new programs started since August 1956 and for improvement of old programs; (3) extending benefits of the program to the territory of Guam.

An identical bill (H. R. 10622) has been introduced in the House by Representative Kenneth A. Roberts (D), Alabama. The Senate bill has been referred to the Committee on Labor and Public Welfare of which Senator Hill is Chairman. The House measure has been referred to the Education and Labor Committee of which Rep. Graham A. Barden is Chairman.

The law authorizing federal funds for practical nurse training expires June 30, 1961. Unless it is amended, as provided in S. 3025 and H. R. 10622, this is the last year that Congress can appropriate funds for practical nurse training.

As of this date we do not know the attitude of the Administration toward the bill extending provisions of the law. We do know that the Administration has not recommended to Congress that the law be extended. This could mean opposition to S. 3025 and H. R. 10622. If this is the case, then the President would likely veto the measure if approved by Congress. The President's action (approval or veto) will depend almost entirely on the attitude of top officials of the Office of Education and the Department of Health, Education, and Welfare. Only time will reveal their attitude.

AREA REDEVELOPMENT MEASURE. There is some indication that Congress may take action on this measure (S. 722), which calls for federal funds to State Vocational Boards for the training of unemployed persons living in designated depressed areas. This measure was approved by the Senate last year and has been approved by the House Banking and Currency Committee. It is now pending before the House Rules Committee.

M. D. Mobley

M. D. Mobley, Editor-in-Chief
and AVA Executive Secretary

Building castles in the air?

Bring them down to earth with AVA's new publication—

DEVELOPING EDUCATIONAL SPECIFICATIONS FOR VOCATIONAL AND PRACTICAL ARTS FACILITIES.

. . . 48 pages of precise guidance for educators who are responsible for planning new or expanded programs. Much material has been written on the subject, but here is probably the first down to earth guide to practical techniques for drawing up the vital, and so often neglected, educational specifications which alone can produce good, functional design.

DON'T drive your architects mad!! Spend $1 now — save yourself a lot of trouble!

NB: This document has been approved by the Board of Directors of the American Institute of Architects on the recommendation of the National AIA Committee on School Buildings and Educational Facilities.

Many AVA experts generously offered their time and efforts to assure the authenticity of this material. Order your copies TODAY. Why not order extra copies for your Advisory Committee members? Board of Education members? Colleagues? Others?

What the architects don't know CAN hurt you ! ! ! !

AVA HEADQUARTERS
1010 Vermont Ave., N. W., Washington 5, D. C.

Please send me _____ copies of DEVELOPING EDUCATIONAL SPECIFICATIONS FOR VOCATIONAL AND PRACTICAL ARTS FACILITIES @ $1 each. Bill me ( ). Payment enclosed ( ).

Name: _____

Address in full: _____

_____

_____

10 per cent discount on orders of 10 or more — no return policy.

DO NOT DISTURB
Architectural Drafting Going On

Everywhere in technical and vocational high schools, in technical institutes and colleges throughout the nation, architectural drafting is going on . . .

In the many Schools where *Architectural Drafting, Third Edition* is being used, students are applying themselves *enthusiastically*. The reasons are many . . .

Full information about ARCHITECTURAL DRAFTING, 3RD ED. by William J. Hornung is available. Just write to:

PRENTICE-HALL, INC.
Educational Book Division
Englewood Cliffs, New Jersey

FOR THE SCHOOL SHOP

BENCHES
CERAMIC SUPPLIES
DRAWING & DRAFTING SUPPLIES
ELECTRICAL SUPPLIES
FINISHING MATERIALS
HAND TOOLS
HARDWARE
LEATHERWORKING SUPPLIES
MACHINE TOOLS
METALCRAFT TOOLS
METALWORKING TOOLS
METALS
PORTABLE ELECTRIC TOOLS
PRECISION TOOLS
SHEET METAL EQUIPMENT
WELDING EQUIPMENT

PATTERSON PB BROTHERS
15 PARK ROW NEW YORK, N.Y.
YOUR MOST DEPENDABLE SOURCE SINCE 1848

From the Public Information Committee

(continued from page 2)

come post-high-school institutions which would take from the high schools a part of the burden of providing vocational education. Many would also be glad to be able to counsel their students regarding opportunities for further education other than those the colleges provide.

There are many other potential allies in providing post-high-school vocational and technical education, but in promoting it we should not overlook the contribution that could be made by those closest to us, our colleagues in secondary and collegiate education, who would be with us if they fully understood and whose influence might be the determining factor in getting this kind of education accepted.—H. M. HAMLIN, Chairman.

AVA PROGRAM OF WORK 1960

THE OBJECTIVES of the AVA for 1960 are herewith broadly stated to inform the membership of major emphasis for the year. The AVA Executive Committee, general committees and special committees have worked out ways and means to try to accomplish the objectives. Much responsibility for administering the program is borne by the AVA office staff. Programs of work of state associations geared to that of the AVA will assist materially in improving vocational and practical arts education not only at state and local levels but for the nation as a whole.

PROMOTION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION

a. Publish and distribute a series of leaflets about vocational and practical arts education.

b. Prepare magazine articles on vocational and practical arts education and arrange to have printed in many publications.

c. Provide speakers to discuss vocational and practical arts education at meetings of organizations and assemblies.

d. Produce a film on trade and industrial education and make it available through a film company.

e. Encourage state associations to put into action a program of informing the public about vocational and practical arts education.

f. Participate in programs of organizations currently expressing an interest in vocational and practical arts education and seek means of contacting other organizations that should become interested in the programs.

IMPROVEMENT OF VOCATIONAL AND PRACTICAL ARTS EDUCATION

a. Develop a program through the AVA Research Committee to stimulate more research.

b. Disseminate to teachers, supervisors, directors and teacher educators the results of findings of recent research.

c. Through articles in the AMERICAN VOCATIONAL JOURNAL provide information on new approaches and new techniques in the teaching and administration of vocational and practical arts programs.

d. Provide information on new and improved equipment and supplies through advertising in the AMERICAN VOCATIONAL JOURNAL and through commercial exhibits at the annual convention.

e. Conduct an annual national convention composed of program participants that will stimulate improvement of the vocational and practical arts program at the state and local level.

f. Give full support to every effort to gear vocational and practical arts education to today's changing needs.

PROGRAM DEVELOPMENT

a. Secure federal appropriation for fiscal 1961 of full amount authorized under Title I of George-Barden Act (agriculture, home economics, trade and industry, and distributive education).

b. Secure federal appropriation for fiscal 1961 for amount that can be used by states under Title II of George-Barden Act (practical nurse training).

c. Secure federal appropriation for fiscal 1961 for amount that can be used by states under Title III of George-Barden Act (Title VIII, National Defense Education Act of 1958).

d. If congressional attitude is favorable in 1960, amend Title III of George-Barden Act of 1946 to remove limitation of use of funds "to training of highly skilled technicians in occupations essential to the national defense" so that a broad comprehensive program of vocational education can be conducted on an area basis to meet state and local needs.

e. Secure changes in Public Law 911 (Title II of George-Barden Act—Practical Nursing) to extend period of authorization and make funds available in accordance with specific practical nurse training needs of each state.

f. Support federal legislation to extend educational benefits to veterans inducted into service on or after February 1, 1955.

PARTICIPATION IN PROFESSIONAL ORGANIZATION

a. Work with affiliated state associations in achieving a membership in both state and national organizations equal to 1 1/5 times the number of teachers of vocational subjects reported by State Boards of Vocational Education to the U. S. Office of Education for fiscal year ending June 30, 1959.

b. Expand the program of the association through the establishment of a Research Committee and an Educational Television Committee.

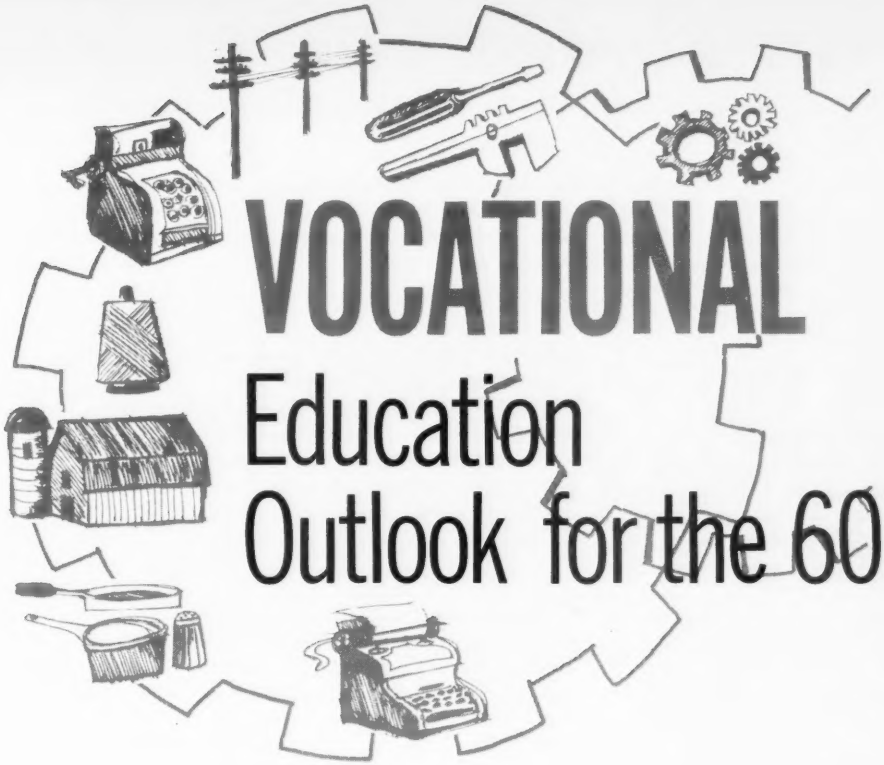
c. Encourage each AVA division to expand the program of work of the division through the establishment of divisional committees that will work on problems peculiar to the subject matter area or to cooperate with the AVA general committees.

d. Encourage affiliated state associations to strengthen their organizations through an expanded program of work.

e. Provide communications to state associations suggesting programs of action for state associations.

f. Produce a 16mm 28 minute film in color to portray the values of belonging and participating in a professional organization.

g. Conduct regional workshops for officers of affiliated state associations.



VOCATIONAL Education Outlook for the 60's

By M. D. Mobley

FORECASTING THE GROWTH of vocational education during the next decade could prove to be as inaccurate as the predictions of many demographers during the thirties who said that the population of the United States would reach 165 million in the year 2000. Today, at the beginning of 1960, the nation's population is more than 180 million and may exceed 200 million by 1970.

This population "explosion"—a boon to American business—calls for more of everything, including jobs. New technology and new methods of production and distribution are creating new occupations and changing old ones. Scores of products not yet being produced will be on the market before the end of the sixties. These dramatic changes in American life will call for a new kind of vocational and technical education.

James P. Mitchell, Secretary of Labor, says: "The general demand for skilled workers will continue to be a fundamental manpower fact in the future. . . . The pinch gets tighter as the economy grows and as our national appetite for goods and services grows in billion dollar gulps."

In the sixties we will have more people needing more goods and services. Technological progress will foster demands for more highly skilled personnel and fewer unskilled and semi-skilled workers. Population growth and technological changes will force us to expand, revise and improve virtually all phases of vocational education. The program must be patterned on changing conditions if needs are to be served and our high standard of living is to be maintained.

If public schools fail to meet the challenge, private groups within industry, labor organizations or other agencies of the government will perform the service. Labor and industry should and will continue to be involved with trade and industrial training. But it would be a mistake for the public to relinquish its interest in and control of this important phase of vocational education.

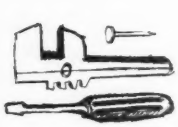
If the public schools fail to meet their responsibilities for effective vocational programs, the resulting inefficiency of American workers could seriously affect the amount of our imports and exports, thus endangering our economic growth. Marketing American goods in foreign countries is becoming increasingly difficult because, in too many instances, we cannot compete successfully on a price basis with goods offered by other nations. This has forced some American industries to move their operations entirely to foreign soil, or to establish branch manufacturing plants outside the United States. If this trend is not halted, our national employment picture could be drastically altered. On numerous occasions Russia's Khrushchev has announced Soviet plans to lick us in an economic war. In his speech to the Economic Club of New York City last September he said:

"All of you are well aware of the fact that we are offering you economic competition. Some describe this as our challenge to the United States of America. But, speaking about challenges, one might say . . . that it was the United States that first challenged all the world; it is the United States that developed its economy above that of all countries. For a long time no one dared to challenge your supremacy. But now the time has come when there is such a state which accepts your challenge, which takes into account the level of development of the United States of

THE FUTURE LOOKS BRIGHT FOR AREA VOCATIONAL PROGRAMS

America and in turn is challenging you. Do not doubt that the Soviet Union will stand on its own in the economic competition, will overtake and outstrip you."

Machine tools, the basic instruments of industrial production, are being produced in Russian plants "with less than half the man-hours required in comparable Western operations," according to a front-page story in *The New York Times*. This story was based on a report by Seymour Melmon, associate professor of industrial management and engineering at Columbia University and a consultant of production techniques, who spent part of last August and September in Russia studying



production methods. Professor Melmon said, "If present trends continue the Soviet Union will in a few years have a world lead in efficiency in the production of machine tools, the basic equipment of modern industrial economies."

As a part of Soviet economic plans, Russia is now reorganizing its entire system of education, and it is scheduled to be completed by 1963. The new reorganization law calls for a greatly expanded program of vocational education—patterned somewhat after the programs we have been developing in vocational and practical arts education during the past 40 years. Soviet leaders are acting on the theory that success in winning an economic war depends in large measure upon the skill and productivity of their people—and this comes through vocational training.

Regardless of the hysteria created by the Russian Sputniks, it seems safe to predict that there will be a great expansion of vocational education during the sixties. The public will demand it. This is indicated by a recent Purdue University study which shows that 83 per cent of a carefully selected sample of leaders in many phases of American life believe that vocational education is extremely important to the security and economy of our nation.

It is not possible to predict accurately the details of developments or even the extent to which vocational programs will be publicly financed and controlled. However, social, economic and technological changes, coupled with population growth and foreign economic competition, would seem to indicate the following developments in vocational education.

PROGRAMS FOR ADULTS. There will be a tremendous upswing in vocational programs for out-of-school youth and adults. Technological developments in industry, agriculture, business and distribution, and new homemaking problems will demand stepped-up vocational programs for adults. This trend is underscored by the fact that in our nation's capital today virtually every major organized group has a staff of specialists charged with the responsibility of developing vocational programs for journeymen, apprentices, farmers and other workers. These training specialists are employed by both management and organized labor groups. Through membership action at state and local levels they will continue to demand more training programs to keep their workers up-to-date in science and technology and to advance skills. If public schools fail to provide the training needed and requested, these organized private groups will finance programs from their own resources.

AREA PROGRAMS. Area vocational schools and programs will move forward quickly during the sixties. This will not be a new development, since many states launched such programs years ago—one as early as 1915. Then, too, large cities have for some time operated specialized vocational-technical schools that serve all or a large part of the metropolitan area. But many more area schools and programs are essential if all Americans who need and can profit from such instruction are to have opportunities for vocational training. Many of these programs will be developed to serve rural youth and adults—primarily farm youth beyond high school age—who in past years have had access to vocational training only in agriculture, home economics and in some cases business education.

As mechanized farming continues to force more youngsters off the farms and into urban areas to seek employment, farm youth will of necessity need more vocational preparation. The March 1958 issue of the *Farm Journal*, which has a circulation of approximately 3 million, carried a splendid feature on area schools entitled "The Kind of School We Need Everywhere," which concluded with this plea: "*Farm Journal* goes on record as strongly in favor of state aid to provide more funds for area vocational schools. We need such schools to keep America strong, and we need them for the sake of farm boys and girls. Why not do something about it in your community and state?"

COMPREHENSIVE HIGH SCHOOLS. The sixties will bring new growth for comprehensive high schools with strong vocational and practical arts programs, especially in semi-rural areas and in cities with a population of 100,000 or less. James B. Conant's report, "The American High School Today," will contribute much to this development. Currently many institutions that are called comprehensive high schools are failing miserably to serve the educational needs of all the pupils enrolled.

They are offering little or no vocational education. To be truly comprehensive, high schools must meet the secondary educational needs of *all* youth.

HOME ECONOMICS EDUCATION. During the sixties home economics education will continue to occupy an important place in the offerings of secondary schools. New problems face America's families as more women enter employment outside the home. Half the new workers will be women, and more than a third of all wives will work outside the home. This calls for an intelligent sharing of home responsibilities by the husband and other members of the family. Larger middle- and upper-class families will call for renewed concentration on the study of child development, nutrition and human relationships. In home economics, as in other phases of vocational education, there will be a continued increase in the number of adult enrollments.

AGRICULTURAL EDUCATION. Vo-ag programs will continue to be an important offering for high school boys in rural schools, but future years will bring more emphasis on the selection of students.

Reprinted from January, 1960, OVERVIEW, Copyright 1960 Buttenheim Publishing Corp.

CAREFUL SELECTION OF STUDENTS FOR TRAINING WILL HAVE NEW EMPHASIS

Today agriculture is the only vocational program available for boys in many rural schools. As more area programs in other phases of vocational education are developed, pupils will find more choice in occupational training, which in turn will result in a better selection of pupils for instruction in vocational agriculture.

The most important development in this phase of vocational education in the sixties will be the expansion of programs for young farmers. Enrollees will be young men who have completed high school and are already engaged in farming. In many states these courses will be taught by agricultural specialists serving as itinerant teachers. Some of these courses will be conducted on a short intensive basis at area vocational schools. Much of the course content will deal with farm management problems involving finance, marketing, use and upkeep of farm machinery, use of

electricity on the farm and the application of recent agricultural research findings. To keep abreast of these rapidly changing developments, both young and adult farmers will continue to demand educational services.

DISTRIBUTIVE EDUCATION. Today, a high per cent of American workers are employed in the field of distribution, and this percentage will undoubtedly continue to climb during the coming decade. While instruction in distribution has been neglected in the past, we should soon see exciting new activity in this phase of vocational education. Enrollments will be made up almost entirely of employed people. Because improving efficiency in distribution could be instrumental in reducing the cost of living, public education must of necessity give more attention to this phase of education.

BUSINESS EDUCATION. The amount of paper work involved in American business is on the increase which will mean more opportunities for employment in all kinds of business occupations. In the future, emphasis will be on selecting business students who have the ability to learn English, exercise good judgment, and acquire the necessary skills. The large turnover and the expanding need will result in a continuing demand for competent workers in this field. Electronic business machines will also influence the offerings in business education courses in the years ahead.

TRADE AND INDUSTRIAL EDUCA-tion. In trade and industrial vocational programs one major improvement in the sixties will be reflected in the selection of students for specific courses. Vocational schools that are used as a dumping ground for maladjusted or low IQ youth will serve little, if any, useful purpose in upgrading our nation's work force. In recent years school officials of 15 American cities with the largest population have joined together to find better ways to select students for specific vocational training programs. Organized labor and management groups are taking more interest in this problem as the need for intelligent, well trained, competent workers becomes more acute.

During the next ten years scientific and technical information will have a greater influence on vocational instruction in trade and industrial education than it has in the past years. This is an essential development for both in-school and out-of-school groups. Much of the instruction for apprentices and journeymen will be in technical aspects of the occupations. Programs of instruction for employed workers—apprentices, journeymen and others—must of necessity be multiplied during the sixties.

America's productive peak is no accident. It has occurred because its people have developed great education programs for both youth and adults to give them the ability to produce more, and thus have more. These programs comprise both general and specialized education. They include instruction in citizenship, in the humanities, in technical, scientific and practical education. No nation can remain strong or maintain a high standard of living unless there are adequate provisions for passing on to new generations the skills and knowledge of productive workers of today, and in the march of progress helping them acquire new knowledge and develop new skills.

From left: Leonard Skolnick, First Vice-President, NJVAEA; Dr. M. D. Mobley, Executive Secretary, AVA and author of this feature; Dr. Albert E. Jochen, N. J. Assistant Commissioner of Education, Vocational Division; and Florence L. D. Heal, President, NJVAEA, pose at the New Jersey Vocational and Arts Education Association meeting at Atlantic City Nov. 14th.

Mr. Skolnick is an industrial arts teacher in the Newark Elementary Schools and Mrs. Heal is Chairman of the Home Economics Department of the Moorestown Public Schools.

How industry • government • educators • and an enthusiastic public can translate dreams to reality

THE AREA VOCATIONAL PROGRAM BOOM IN NORTH CAROLINA

By A. Wade Martin

DURING THE LAST few years, the people of North Carolina have demonstrated their faith in themselves and their enthusiasm for the future by endorsing and actively supporting a variety of programs designed to bolster their state's economy and raise its standard of living. These movements have paid off in progress.

Exciting things are happening to vocational education in North Carolina as we see our area school program growing by leaps and bounds, but I ask you to keep in mind that our program could double or triple, and it would still be smaller than the programs of several other states.

North Carolina has invested more in capital improvement for industrial education during the past 18 months than it did during the entire period of 1918-1957. For example, our capital improvement expenditures for buildings and equipment was almost one million dollars a month during 1959. This sounds good, but if we were to continue at this pace until 1965, we would still have less capital outlay investment in trade and industrial education than at least a half dozen other states. I might add that our current expansion plans will be complete within 12-18 months.

It might be well to look for a moment to see what is happening in North Carolina. We are a growing state. We have for many years ranked as the leading state in the southeast in the number of persons employed in manufacturing. In the 1950 census, we were eighth among all states in the nation in the number of persons engaged in manufacturing. In recent years, our State has placed emphasis on the factor of industrial climate and as a result of this emphasis, new industries for the year 1959 provided about 35,000 new jobs in manufacturing.

Mr. Martin is State Supervisor, Trade and Industrial Education, North Carolina.

BECAUSE OF THIS interest in industrial development, two years ago we in vocational education received a small appropriation from our legislature to strengthen and improve industrial education.

You may ask, how did we get our first appropriation?

We told our people a simple truth—that for too long there has been a recognized need for an improved program of industrial and technical education in our state. We said:

"If the state is to continue to expand industrially, and even to hold its own . . ., it is essential that workers be trained in the techniques and skills of modern industry. Engineers must have the support of craftsmen and technicians. At the same time, it is recognized that there are thousands of young people in North Carolina available to meet this need, but who are inadequately trained in technical skills to take advantage of this opportunity.

"With industry's growing demand for trained workers on one side and an ample reservoir of potentially skilled workers on the other, it was imperative—and essential to the state's economy—that some type of program be established to bridge the gap between the supply and demand.

"The potentially skilled workers were, in effect, being denied a part in the economic revolution that is taking place in North Carolina—simply because adequate facilities had not been made available to help them through this transition. All our efforts to develop a balanced economy and bring greater prosperity to the citizens of our state will have gone for naught if we fail in our responsibility to support the means by which people can adjust to the changes."

We asked for two million dollars in 1957 and received a token appropriation of one-half million dollars. Next we made what we thought was a careful study of industrial education as it relates to the needs of our citizens and their employment opportunities.

Our State Board of Education in a policy statement to the local boards of education stated:

"We believe there is a direct relationship between one's educational achievement and one's earning capacity, one's qualifications as a citizen, and one's contributions to society. Industrial education, therefore, has direct bearing upon the solution of the state's problem of low per capita income as its industrial economy expands. Emphasis on industrial education, however, must not derogate from other needs either in general fields of learning or in other vocational fields. As the state's economy becomes more industrialized, more emphasis must be placed on industrial education."

In connection with the policy statement, our State Superintendent and the State Board of Education asked all local boards of education to conduct a survey of job opportunities—working from a format developed on the state level—with the idea that the survey pieces could be fitted together to give us an idea of total needs. To encourage local boards of education to comply the State Board of Education indicated that the available one-half million dollars would be alloted to those areas which could objectively qualify for a regional vocational-technical school which we chose to call an *Industrial Education Center*. This name was selected because of existing confusion in terminology.

NORTH CAROLINIANS WILL PROFIT FROM 18 NEW TRAINING CENTERS

FORTY-THREE of our most industrialized areas submitted requests for these regional schools, and the State Board of Education approved 18 as showing valid need. In effect, the State Board of Education had approved a state-wide expansion with only one-half million dollars in sight which could be spent for capital improvement. We believe this was a wise decision since approval of 18 centers recognized a state-wide need and contributed to state-wide support. Further, it placed a responsibility on the people to provide funds for this purpose. (I might point out that capital outlay funds at the state level were for equipment only, and as a part of the challenge plan the local school boards singularly or collectively were to provide the buildings according to standards we established.)

The state-wide survey was an interesting experience. It involved the work of over 1,000 local people who collected the data. When results were organized, we found only one course which was common to all of the schools planned, and that was automotive instruction to service the 1.3 million cars in our state. It is interesting to note that although enthusiasm had been primarily generated from an interest in industrial development, the service trades showed a valid need.

After the approval was given by the State Board of Education for 18 regional schools, the challenge was upon us. As you can see, a program of this magnitude required many millions of dollars, yet we only had a half million dollars, and plans for financing would require help from all available sources. It has been significant to us that so many people are enthusiastic about our program and that help has come from so many sources.

PERHAPS THE GREATEST assistance came from a national recognition of need and the federal appropriation for Area Vocational Education under provisions of the National Defense Education Act of 1958. Because so many other meetings at this convention have dealt with the implications of this Act, I'll not attempt to elaborate except to say the Act reaffirmed our faith in our direction.

One other source of help was the Department of Defense. Under Public Law 883 of the 80th Congress, the Department of Defense was authorized to lend to non-profit institutions equipment stored in the National Industrial Equipment Reserve. Our State Director, J. Warren Smith, and I, along with members of the State Board of Education, made several trips to Washington to lay our case before officials of the Department of Defense. Because of defense industries in our area and because of the type of educational program we had planned, the Secretary of Defense authorized the use of defense tools in North Carolina. We now have about one million dollars in machine tools from this source. This equipment is not donated, but is loaned under terms of a five year contract. These machine tools may be inspected at our new industrial education center in Winston-Salem, which is due for completion March, 1960.

This loan, as we understand its provisions, is "experimental" and although we have nine other area schools under construction, we do not plan to ask for assistance in equipping these schools until we, the Defense Department and the General Services Administration have ample time to evaluate the mutual benefits of our initial venture.

NORTH CAROLINA industries demonstrated their faith in this program by donating *new* equipment valued at $160,000. I emphasize *new* equipment because we believe you cannot do today's job with yesterday's equipment if you want to be in business tomorrow.

More help came about five weeks ago when a state-wide bond issue passed by a margin of two to one to give us another 1.5 million dollars in funds with which to purchase equipment. In addition, nine local bond issues have passed by margins as high as 12 to one. We believe deeply that as additional funds are needed, the people of our state will furnish them, providing we maintain quality instruction.

People who visit us, ask us these questions: How did you get so much enthusiastic support? Where are you going from here? What must now be done to develop the full potential of this program? So let us look for a moment at the overall program as planned.

WE BELIEVE any good program of vocational education is determined largely by the need, a realistic curriculum, adequate buildings and equipment, a strong faculty, and qualified students.

Our standards of quality for these centers relative to student admission and student progress are different from the vocational education programs we have been accustomed to during the past. To safeguard student selection, we have inserted in the Public School Laws of North Carolina that only qualified students would be admitted. Through a cooperative testing program with the Employment Security Commission, we have established the minimum standards for student admission. The entrance requirements vary with each course but always attempt to require the basic competencies necessary for success in the area for which training is given.

For example, pre-employment training for automotive mechanics requires that a student make a certain minimum aptitude score in addition to 13 other criteria for admittance. We don't know how valid these tests are (GATB), but they safeguard our program from being a dumping ground. As to need, this has been shown by a survey, and the decision as to whether a course should be continued or dropped from a curriculum is determined annually on the basis of a valid occupational survey.

Changes in the curriculum in these centers can be made without great difficulty because once the full program is in operation, there will be little red tape involved in exchanging equipment between centers to coincide with area needs, and secondly, the buildings are constructed in such a way as to eliminate inside load bearing walls, a condition that facilitates alterations with little effort. Our architects and study teams visited programs in most states in the nation as a background to developing our building standards.

One of the most important factors in the development of our area schools has been the frequent use of consultants. Each consultant gave us something that we were able to use.

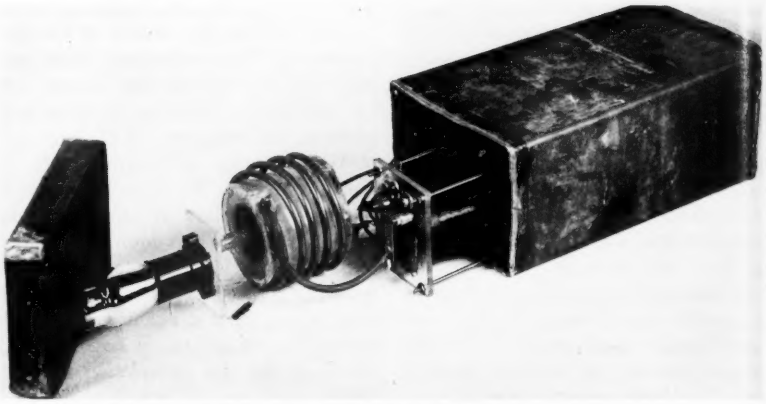
For example, Dr. Joseph Nerden of Connecticut has worked with us so often that Connecticut people have told us every time they see him he is either getting ready to visit North Carolina or just getting back. Here are some things we learned from Joe Nerden and would like to share with you.

(Continued on page 24)

PROJECTS—OR WHAT?

By Roy G. Fales and Roy V. Orendorf

Dr. Fales is the recently retired Chief, Bureau of Industrial Arts Education, New York State Education Department; Dr. Orendorf is Associate in Industrial Arts Education, New York State Education Department.



X-RAY MACHINE—Courtesy of New York State Education Department

FOR MANY DECADES industrial arts students have made projects, performed exercises or done manual work in shops for a number of reasons, chief of which was the firsthand experience with tools and materials. In fact, industrial arts is known best for its most distinguishing characteristic; i.e., shop work. Take this away, and it will be reduced to purely an abstract subject. The work done has been known by many titles and many forms.

The type of educational project in this jet age may change somewhat to reflect our current interest in science, but it is readily apparent that our youth today still like to experiment and work with tools and materials and make things to possess as they did in the past. Today, for the scientifically minded boy, we are beginning to think in terms of projects such as the incubator, rain gauge, small animal maze, solar furnace, transit and X-ray machine (see illustration) which may be used to stimulate further study and learning upon completion. Some students will profit from an experimental program, almost semi-technical in character, in which industrial materials and products might be tested for quality; or wood could be tested for moisture content; or levers for their advantages, etc. On the other hand, a majority of students prefer to construct conventional projects such as low tables. If history continues to repeat itself, undoubtedly the take-home project will occupy a place of prominence in industrial arts in the future as it has in the past.

BUT WHAT is the word "project" which has aroused so much interest? To one person it is a job. To another it is a learning unit. Many teachers consider it to be only an article which a student constructs in a school shop as was formerly the practice during the manual training era. The Dictionary of Education,[1] prepared under the auspices of Phi Delta Kappa, provides a broad and comprehensive definition of the project. It is sufficiently general to encompass all of the connotations and ramifications of industrial arts philosophy.

In this Dictionary we find that a project is: "A significant, practical unit of activity having educational value and aimed at one or more goals of understanding; involves investigation and solution of problems and, frequently, the use and manipulation of physical materials; planned and carried to completion by the pupils and teacher in a natural 'real life' manner."

Careful study of this definition shows that the "project" is not just an article, problem or an exercise. It is a concept of well-rounded learning or work unit which in industrial arts work includes manipulation, construction and experimentation, planning and problem solving, together with the necessary demonstrations and related cultural knowledges and understandings.

The project might well be likened to a wagon wheel with the hub representing the physical aspects of construction. These might include the spatial, mechanical or electrical relationships as in the arrangement of a printed page or the completion of a commonplace job like a bell circuit. The spokes of the wheel, representing the mental aspects of learning, might include such activities as planning, designing, observing, reading and problem solving. The rim of the wheel, encompassing all the learnings, understandings and physical work might be considered the broad generalizations unifying the student's experience and learning.

The true meaning of the word "project" includes unit of study, exercise, experiment, planning, discovery, practice, knowledge and other facets of learning.

BUT LET'S not quibble over terms. It matters little whether we call a student's work project, exercise, job, unit, experiment, invention or other term, as long as the shopwork is not confined to manual performance, or to the acquisition of knowledge. Industrial arts educators must recognize that there are bright, normal and dull students. They must recognize that some boys have a deep interest in discovery, invention, experimentation or creative work; that others will do little more than follow orders while the majority will do some of both according to their talents. All students have a desire to own or possess articles.

When planning for classes, it is desirable that teachers should recognize the range of student ability and interest and organize their work so that a student will be led to work and learn to capacity. He must be caused to plan,

(Continued on page 24)

1. *The Dictionary of Education.* Carter V. Good, Editor. McGraw-Hill. 2nd Edition. 1959. p. 421.

LETTING THE PEOPLE KNOW

What information do they need?

By Dr. H. M. Hamlin*

Four key issues:

What are the evidences that the public relations of vocational and practical educators need to be improved?

What would do most to improve them?

What information does the public need?

What is the AVA Committee on Public Information doing? How could the states help?

EVIDENCES THAT OUR PUBLIC RELATIONS need improvement are many. The public is not recognizing and facing the problems it has in providing vocational and practical arts education. Education for useful work is as important as it ever was. The education for work now needed is more extensive and more complicated than was ever before required. We have started to develop a comprehensive program of vocational education; we have made great progress; but we are far from completing the program that has been undertaken. In the meantime, national attention has turned to the shoring up of science, mathematics, English, the 3 R's, and college preparation, which needed to be shored up. The next wave of public indignation about the schools may be directed toward more adequate education for work.

Evidences of lack of public understanding of vocational and practical arts education can be found in abundance in your own communities. The press, radio, television, national organizations (lay and professional) are giving little attention to it. Many articles and talks minimize its importance. Teachers complain that their local efforts are not supported by state and national publicity.

How was the public opinion shaped that brought about the establishment of our program? We had great exponents of vocational education in those days: Prosser, Snedden, Coolley, Allen, and others, who could make telling appearances before many kinds of audiences and who wrote extensively. They had a reasoned philosophy of vocational education. They talked about education for useful work, not about fragments of a program of vocational education. Somehow they got national organizations with 20 million members to go on record in favor of national aid to vocational education. Are we doing as well as the pioneers?

WHAT WOULD Do Most to Improve our public relations? In planning a program of public information, we must realize that the voters hold all of the final controls over public education. Not all individual citizens can be active in and informed about school affairs. School affairs are only a part of the public affairs with which citizens must be concerned. Ours is a representative government, not a pure democracy. But our representative bodies are inadequate for our times. School boards in our greatly enlarged school districts are inadequately representative of the public. Generally over the country they have not evolved well conceived, organized, written policies for their districts, although their only functions are to enact policy and see that it is executed. State legislatures and state boards of education are even less representative of the public and have been less able to evolve sound, consistent policies for the states. Most unrepresentative and least effective of all has been the Congress of the United States, our national school board, which has created 300 separate national programs of education, each operating under a different set of policies.

A larger part of our citizens must become involved in school affairs at the level of policy making. Citizens committees are being used in some 12,000 school districts in the United States. We should try to have 1 per cent of the voters involved continuously in citizens committees of the best type we can conceive. The kind of committee I conceive is fully described in my publication, *Citizen Participation in Local Policy Making for Public Education*, available from the Office of Field Services, College of Education, University of Illinois, Urbana, Illinois. We in vocational education have pioneered the use of citizens advisory committees, but those we now have are seldom in line with the best thinking about the functions and organization of citizens committees. Often, they are unrelated to any other citizens committees in their school systems. We need to modernize our committees.

In attempting to inform the public, we should not scatter our shots. Information should be directed, first of all, to the decision-making groups I have mentioned and those who most influence these groups: school administrators and lay and professional organizations. We need to find out the questions about vocational and practical arts education the decision-making groups are asking and provide them with answers.

Vocational and practical arts educators should become more fully integrated into the teaching profession, so that the full force of the profession will be exerted in providing in our field the programs that are needed. Perhaps we do not realize sufficiently that our own future depends upon the future of the public schools. They have a great future in prospect. Let's contribute to it and share in it.

WHAT INFORMATION Does the Public Need? The AVA Committee on Public Information spent considerable time in February in surveying gaps in public information and misinformation about vocational and practical arts education that is abroad. I shall summarize the Committee's discussion.

There are many who do not understand the importance of education for work or recognize the value their fellow-citizens place upon it. In a recent study at Purdue University it was

* Adapted from an address before the Indiana Vocational and Practical Arts Association at Indianapolis, October 22, 1959.

HERE'S A STIMULATING REPORT FROM AVA's PUBLIC INFORMATION GROUP

found that nearly all of 500 outstanding leaders in American life place a very high value upon vocational education. A Roper poll in February 1958, when the hysteria following Sputnik I was most fully upon us, showed that there were more Americans who wanted the schools to emphasize job-training and technical subjects than there were of those who wanted more emphasis upon the conventional subjects. A surprising number of school administrators in the smaller systems do not know that, while they have been de-emphasizing vocational education, the superintendents in 13 of the largest cities in the country, men whom they admire as the leaders in their profession, have for five years been making a special study of vocational education with the intention of increasing the emphasis upon it.

Many lay and professional people have no concept of what is already going on in vocational and practical arts education. They could not even imagine the great programs of vocational education under way at Baltimore, Buffalo, and Milwaukee.

The American people seem not to have appraised the discrepancy between occupational distribution and the distribution of enrollees in training programs in the schools and colleges. The colleges prepare principally for the professions. Only 8 to 10 percent of the population is required in the professions, yet the new students enrolled in the colleges of the country in the fall of 1958 were 52 per cent of the high school graduates of the previous year. The public must come to realize the dependence of our way of life upon skilled workers outside the professions.

Too commonly the American people think that vocational education is to be provided only in the high schools. Actually, vocational and technical education must be provided largely beyond the high school. New institutions to provide post-high-school technical education are arising all over the country, and we can expect that they will be provided universally. The future of the colleges of the country depends upon the provision of institutions other than colleges for those who do not belong in the colleges. The colleges are not going to be denatured to provide the technical education that is needed; the public should give up expecting that they will and see that the public school system assumes the responsibility.

There is a current myth that private business and industry will provide all of the vocational and technical education that is needed. Actually, there can be no adequate private provisions for it in farming, homemaking, and the small businesses and industries. The larger the business or industry the more likely it is to make demands upon the schools for this type of education.

Too many still think that those who are fitted for nothing else can be put into vocational courses, though the qualifications for entering the non-professional occupations for which the schools prepare are high and rising.

WHAT IS THE NATIONAL Committee Doing? How Can the States Help? The Committee on Public Information of the American Vocational Association held its first meeting in February 1959. It has 15 members, chosen from all divisions of the AVA. It has as consultants Dr. J. B. Conant; S. Reed Dayton, a state senator and Vice President of the Wyoming Association of School Boards; Elaine Exton, Washington correspondent of the *American School Board Journal;* Philip J. Hickey, Superintendent of Schools, St. Louis; and Dean Schweickard, Commissioner of Education in Minnesota.

The Committee has programs in three areas. It is preparing a series of 4- to 8-page publications setting forth the facts about vocational education. It is working with national mass media and national organizations. It is encouraging state and local programs of public information.

Twelve publications are now being prepared. The first of them will appear early in 1960. They emphasize such themes as: *Vocational Education is Being Modernized to Meet Modern Conditions; Vocational Education Creates* (Does Not Limit) *Opportunities; Vocational Education is Continuing Education; Vocational Education is an Integral Part of Sound Public Education.*

Fruitful contacts have been made with the press, radio, and television. During the past year articles inspired by members of the Committee have appeared in publications read widely by school administrators and school board members. The new Editorial Office of the National Education Association in New York, set up to serve the mass media, has been supplied with publications dealing with vocational and practical arts education. Contacts with the American Association of School Administrators led to a program on *Trends in Vocational Education* at the Association's convention at Atlantic City in February 1960. Working relationships have been established with the National Association of Secondary School Principals, the National Association of Public School Adult Educators, and the Press and Radio Division of the National Education Association. Meetings with representatives of other national groups with millions of members are to be held soon. It is believed that information about vocational education is most effectively supplied to members of national organizations when it is supplied by these organizations after it is checked for accuracy by vocational educators.

In the spring of 1959 the Committee sent a letter to each state director of vocational education and each state president of a vocational and practical arts association, urging that state programs of public information be established. Your program in Indiana, which is being initiated today, is the first state program to be reported to the Committee. You are to be congratulated upon your careful planning of a state program of public information and the arrangements you have for following up today's meeting. Much credit goes to your able, imaginative, and aggressive President, Mrs. Elizabeth Volland, and to your State Director W. A. Williams, for their parts in initiating your state program.

The AVA Committee on Public Information is financed primarily by a grant of $4,000 for 1959 from the Sears-Roebuck Foundation. It is expected that the same amount will be available in 1960.

The Committee does not consider itself responsible for a national program of public information. It hopes to activate thousands in vocational and practical arts education, who will see to it that the public is better informed about their field. The Committee works in the background. You may never see accomplishments that you will attribute to us, but you will see accomplishments for which we are directly or indirectly responsible.

"THANK HEAVEN FOR YOU!"

—A Top Retailer Hails Work of Vocational Education—

by W. E. Sturges
Vice President, Personnel
S. S. Kresge Co.

WE WHO ARE RETAILERS recognize that you of AVA are practical educators. You are trained, dedicated teachers of the basic skills upon which industry, agriculture and commerce depend. We have no criticism to make of your educational methods. We have no "viewing with alarm" to do. We say thank heaven for you and for the contribution you are making to a better America.

In these dynamic days one thing we are all sure of is *change*. The things we did and the way we did them yesterday, simply do not fit today's needs. Tomorrow we will be adjusting today's best methods, ideas and techniques. In order to keep up-to-date, it is appropriate that we visit together. We retailers may have some thoughts which will help you adjust to new targets. You educators may see things that we retailers need to know in order to facilitate our adjustments to improve service to our customers, to improve employee relations in our stores, as well as to suggest methods to help the producers of the merchandise that we sell.

IT IS RETAILING'S job to distribute everything that is produced on farms and in factories to the final user—to the customer. The entire process depends on distribution. A tube of toothpaste on a loading dock in Jersey City has no value. It is only when tubes are sold in every nook and corner of this broad land that great factories are able to buy raw materials, employ thousands of people, use machinery, package, advertise and ship their products. And everything produced must be *sold* if the total process is to be healthy and vigorous.

Let's look at that word *sold*. It denotes physical distribution plus something extra, something dynamic and positive. It involves actively trying to convince customers to buy and use the products displayed.

Mechanical distribution might be sufficient in a country that does not produce enough for more than a subsistence standard of living. But this country has much more than that. It has the raw materials, the plant capacity and the people to produce the extras that characterize a high standard of living.

It is only when all the extras—the frills, the gadgets, the better merchandise—are bought by customers and used that the higher standard of living is achieved. Therefore, it is retailing's responsibility in the economic system to stimulate consumption of necessities plus all the extras.

AS YOU IN vocational education train young people for retailing, you help us to do our part better. This in turn helps to improve the job opportunities for others whom you are training so well—farmers, craftsmen, home economists, office workers and the rest.

We in retailing recognize our exciting opportunity and our responsibility in this growing America. We must keep pace. We must innovate. We must constantly find new and better methods to serve the public and distribute all that is produced on the farms and in the factories. So this reminder of our function seemed to be an appropriate starting point as we look ahead together.

The second major part of this discussion will cover some of the career opportunities which make retailing so rewarding. You who teach retailing and who supervise the placement of DE students in our stores, know some of the story, but do you get the full picture? Do you who are in charge of all vocational education in your states or communities know about the career potential in retailing? Let's turn our attention in that direction for a few minutes.

The country's 1,800,000 retail stores employ 8,400,000 people—nearly one-sixth of the total work force. The wide range of kinds and sizes of stores requires a fantastic range of skills and specialized abilities. Between 11 and 12 percent of the jobs are supervisory in nature.

Anticipating that a fairly high proportion of today's DE students are potential manager or supervisor material, here is a capsule report on 11 retail companies:

Combined sales in 1958	$8,458,000,000.
Number of stores operated in 1958	9166
New stores opened in 1959	492
New stores planned in 1960	626

Visualize the need for new talent—for new trainees who will be ready to

step into the new management jobs that this continuing expansion program will require! Companies throughout the United States representing only 4 percent of the total retail business will need 626 new trained managers next year.

AS RETAILERS strive to fulfill their function of aggressively selling more and more merchandise there is a tendency for store units to become larger. This is taking place at the same time new stores are opened. Larger stores require more highly skilled managers.

To fill their immediate and future needs, retailers seek the best available people and put them through carefully developed, practical, in-company training courses—a continuous educational process designed to produce managers in from three to ten years, depending on the capacity and maturity of the trainee.

Retailers are doing much more college recruiting every year. This will continue. But the companies represented here have had a very satisfactory experience with DE students who have not been able to go on to college. Because of the educational background the DE folks provide, supplemented by their own training programs, management of these companies represented here have experienced hundreds and hundreds of heart-warming success stories with your students.

WE HAVE FREQUENTLY been asked, *what about earnings?* Apprentice craftsmen from vocational schools and engineers from college seem to do so much better financially! This is because they have specialized training, and thus, they are able to produce results immediately when assigned their duties. This differential in earnings continues the first few years, but at approximately five to seven years and from then on, manager and executive jobs in retailing are comparable with the best and exceed most.

A start in retailing is similar to the medical student's internship before becoming a full-fledged doctor—with that experience quick maturity is the result. For the high school graduate and the student unable to finish college, the opportunity in retailing cannot be equalled. Earning while learning is the plan—when thoroughly experienced, retailing will pay well those who can produce sales volume.

Student in merchandising laboratory practices sales technique on fellow student

In considering hours, it is true that because Saturday is traditionally the busiest day of the week, it is rarely a day off. But does that make any real difference? How many of us in this room would want to go away every weekend, even if we could afford it? How many glamourous "football weekends" do we plan? Most of us use our days off to cut the grass, rake leaves, fix things around the house, go shopping and all the other home-type jobs that can be done just as easily and perhaps more easily Mondays through Fridays.

Hours have been mentioned as a drawback in retailing. Are they? A night or two at the store each week is excitingly busy and it has not interfered with home or family life for us any more than it has for the banker who now works every Monday night in many parts of the country.

More important considerations are tenure and opportunity. There is year-round stability in retailing. Stores are open every day of the work week regardless of business fluctuations or the weather. And the companies represented here today don't have the turnover that is associated with so many of the glamourous sounding jobs in some other fields.

OPPORTUNITY to grow and to reap as we sow appeals to all of us. Expanding, vigorous chain store companies have opportunities to fit the differing capacities of the individual. The usual compensation plan for managers includes a generous share of the store profits. In the book *Main Street Merchant*, which is the story of J. C. Penney, it was pointed out that managing a chain store is like going into business for oneself, but with someone else's capital.

Examples of how satisfactory and satisfying the opportunity store managers have are brought home to us frequently when a manager declines an offered promotion as a supervisor of a group of stores or an executive position in the home office.

So far this description of the career opportunities in retailing has stressed the paths open to manager and executive positions. Not all of your DE students will go that far. But they will find opportunities to reach their level in work which fits their interests and abilities. Girls may become supervisors, department heads or personnel and training specialists. They may prefer the store office or cashiering. In larger general merchandise stores there may be fashion or sales promotion work. The range is tremendous. Closeness to people—the public and other employees—assures job interest. And the constant activity in stores makes it exciting.

All of the retailers combined today could and would like to tell you more about the career opportunities in their fields of retailing. All agree that it is

an opportunity of great promise for a large proportion of the DE students whom you are teaching and guiding today. Every retailer . . . has enjoyed the thrill of seeing some of the shyest individuals develop and blossom into strong personalities as they gained experience in selling. Their duties bring them in close contact with people—our customers. Imparting their knowledge of merchandise (an important part of selling) is a conversation median which is a new and wonderful educational experience for them. We have seen many of these individuals develop into the best salesmen, the best buyers, the best managers. Their lives virtually have changed through their retailing experience.

The third main topic I would like to discuss briefly has to do with the special traits in people that correlate with success in our business. I will not include those basic skills like willingness to work hard, ability to do simple arithmetic, and ability to express one's self, nor the other qualities which you know are needed in every business. Retailing needs these, too. Here I want to stress four characteristics which may be a bit different from those which are usually emphasized.

The first of these is competitiveness—the ability to thrive in a highly competitive enterprise. It was pointed out that there are 1.8 million retail stores. There is hardly a community anywhere in which the same or similar merchandise cannot be purchased from several stores. Rather recently a trend has developed in retailing where everybody is getting into everybody else's business. All stores are broadening their lines. Drug stores are becoming variety stores with a prescription department. Grocery stores are carrying so many non-food lines that they seem to be "one stop stores." Variety stores are up-grading and expanding to become variety department stores. And so it goes. When the basic function of retailing to increase consumer sales is added to this newer trend, it is easy to see how highly competitive we are. Another ingredient in the competition picture is the battle between downtown stores, suburban stores and shopping centers.

COMPETITION is a good thing. It is necessary. It is the greatest force in the world for assuring the buying public of the best possible prices, assortments and shopping convenience. We believe in competition, even though it pinches once in a while. It is a never-ending stimulant that keeps us on our toes.

This stimulant is felt in every store location. It is shared by everyone in the retail business who is trying to get ahead and working for promotion. What a thrill it is for a local store to be the first in town with a new, hot item, to put in the windows or build counter displays that out-pull other stores, or to break a special promotion that clicks just right! But conversely, what a scramble there is to try to keep ahead of competition and to get an increasing share of local business.

Not everyone is geared to the highly competitive way of life in retailing. It is so basic a characteristic that it is underscored for your consideration. We sincerely believe the biggest challenge a man has to face on whatever job he takes is not the competition of others—but the far more important one of developing himself to his fullest capabilities.

Incidentally, competition is so valuable to the public that all of us who are interested in distribution should look critically at any and all proposals to reduce it by legislation, regulation or otherwise.

HIGH MORAL PRINCIPLES are required of those who would make progress in our companies. Consider a few examples. The supervisor who has personal integrity and strong working religious beliefs is usually superior in his human relations and so in his personnel relations. He is a better boss. He is more apt to have a high morale store, a friendlier and a better one.

It is especially appropriate to emphasize the need for moral principles in business at this time. The newspapers have been too full of the reverse. In retailing some merchants have seemed to achieve temporary success by quoting fictitious and exorbitantly high comparative prices. We don't want that. We don't think the public likes it. We want managers and executives who will be firm, tough competitors but whose personal code always keeps them within proper ethical bounds.

The third characteristic needed in retailing is *good will*. It is the most valuable asset of any business. The more friends we have the more successful we are. Our store team members are taught to be tactful. Tact is saying and doing the proper thing for the occasion. It makes friends, helps sell goods and keeps customers, promotes and maintains good will. The old saying that "A Pleased Customer is the Best Advertisement" is just as true today as ever.

The final quality I want to mention can be best described as *community-mindedness*. Every retail store is a local store, regardless of its ownership, franchise or voluntary affiliation. Each store unit serves its local shopping area. That shopping area can be improved or injured by its over-all community health. Voluntary welfare drives need the leadership of local businessmen. So, too, do civic problems like better schools, higher teacher salaries, adequate parking and traffic control. Downtown rehabilitation and the like require the active attention of business leaders.

OUR STORE managers are busy people. They don't have much free time. But we have all seen examples of communities that have deteriorated because they have not had adequate business leadership. Retail companies have a financial stake in all their store locations. They have an obligation to the community which only the local store manager can fulfill.

Professional Courage and Hard Work:

THE CHALLENGE OF THE 60's

AT THE PRESENT TIME, about 14,000 of the nation's 25,000 public high schools offer some form of vocational education. Instruction is provided in these programs by 60,000 teachers for approximately four million youth and adults.

Practically every public high school in the nation offers instruction in some form of practical arts. This year there are roughly 35,000 teachers of industrial arts, 45,000 teachers of business or commercial education, and about 15,000 teachers of general home economics. There are also thousands of teachers of general agriculture, but no one seems to be interested enough in this group to find out how many there are. Most of the 10 million secondary school students of the nation take courses in one or more of the practical arts subjects.

But since the advent of Sputnik, some critics of education have advocated the elimination of "fads and frills" from our schools, and they sometimes include the practical arts and vocational subjects among the "frills." But to prescribe a strictly academic program for *all* of our youth without regard to *ability, interest* or the *needs of society* is pure nonsense.

LESS THAN 20 per cent of our entire labor force is employed in professional, technical, proprietor, managerial and official occupations *combined;* the remainder (over 80 per cent) are homemakers, industrial and service workers, farmers, stenographers, salespeople and the like — not professional workers. To attempt to teach *advanced* mathematics, science and foreign language to *non-academic* youth would be a waste of time. Not only would they not learn these subjects, but to try to teach them such material would lead to the neglect of *youth with academic aptitude* who could learn these subjects with satisfaction to themselves and profit to society.

Russia has declared an economic war on the United States. She openly boasts that she intends to beat us, not in a shooting war, but by *out-producing* us. And she is deadly serious about it, for on the cow barns and billboards all over Russia are signs which cry out "Pass and surpass America." How do we fare in this struggle at the present time? With a little more than six per cent of the world's population and less than seven per cent of the world's land area, we produce nearly one-half of the world's manufactured goods, and we consume well over one-third of the world's goods and services. In brief, our national strength lies, not in guns, bombs, and missiles, but in *productivity*, and our productivity rests on *power, machines,* and the *skill* to use them!

It is the function of the practical arts and vocational education to *perpetuate and improve the productive know-how* of our people in the economic enterprises on which our security rests. This type of education, therefore, is essential to the *economic well-being of our people* and to the *common defense of the nation.* Consequently, now is no time to retrench on these fronts in favor of a school program borrowed from Eighteenth Century Europe and designed to serve an aristocracy.

THE CONGRESS of the United States realizes the fundamental importance of our work, for year after year they increase the amount of federal funds which go into vocational education, even though some may recommend the elimination of these funds.

This feature is adapted from the Chicago Convention Address of AVA's 1959 President Dr. H. H. London

No, my fellow workers, practical arts and vocational education are not on the way out! They are here to stay. The outlook in these fields is good, but we have some problems which present a real challenge to us.

SINCE THE time of the Pilgrim Fathers, agriculture has been a basic enterprise in this country, and it will continue to be so indefinitely. While it is true that only nine or 10 per cent of our labor force is engaged in agriculture, in contrast to roughly 50 per cent in Russia, all of us live off the products of our farms.

Vocational agriculture is perhaps our most extensively developed program

Taking the country as a whole, vocational agriculture is perhaps our most extensively developed program of vocational education. The tremendous productivity of our farms stands as a monument to vocational agriculture and to our land-grant colleges of agriculture.

Certainly, those who remain on the land must be better educated than ever before if they are to succeed in the highly complicated business of farming. While we have a surplus of farm commodities right now, with the exploding population everywhere it is conceivable that in a very short time we may actually have a scarcity of food in this country. Besides, half of the people of the world today are hungry.

IN THE AREA of industrial education we find the greatest variety of programs. A majority of the public high schools offer industrial arts, most teachers of which belong to *neither* the AVA nor the AIAA. Some teachers of industrial arts talk and write as if this phase of education should take over the social studies and teach a good portion of the science and mathematics. I raise this question: wouldn't we be on sounder ground in industrial arts if we should *emphasize those things* which *this subject and no other* contributes to the general education of youth? There are three such *unique* purposes of industrial arts: to develop *skill* in the care and use of industrial tools and materials, to provide *exploratory experiences* in industrial activities for guidance purposes, and to develop the *skill* and *knowledge* necessary to *make and read* working drawings, the language of industry.

As schools become more realistic in their guidance programs, industrial arts will, I believe, be called upon to assume a heavier responsibility for the education of non-academic youth. At the same time, we are likely to find academically talented youth, *especially on the upper-grade levels*, guided away from industrial arts and into college preparatory programs and hence the professions. Multiple-track programs in our big cities are already resulting in just this.

The great challenge here, as I see it, is for us to be realistic about this whole problem and to develop programs that will more nearly meet the needs of average and below-average youth, the ones who will remain in the communities where they grow up, and serve on boards of education! This does not mean, of course, that industrial arts has nothing to offer the bright boy; it simply means that fewer and fewer of these will take the work *on the upper-grade levels*. On the whole, however, industrial arts will become more important, not less, in the next decade.

WHILE 40 per cent of our labor force is employed in industrial occupations, and another 10 per cent in service occupations, only a small percentage of the high schools of this country offer vocational-industrial education, reaching only a fraction of the youth who will eventually find employment in these occupations.

The development of area vocational schools is, I believe, the answer to this problem. One of our greatest challenges in the next decade will be to get Title VIII of the National Defense Education Act amended and extended to permit the development of genuine area vocational schools that will serve occupations and geographical regions heretofore not adequately served by regular programs.

In spite of the great demand for skilled technicians and industrial workers, follow-up studies reveal that from 35 to 45 per cent of those trained in our day-trade schools do not work in the occupations for which they are trained. What is needed here is more effective vocational guidance and placement service. Only those who can profit by the instruction and who intend to work in the occupations for which the

AVA Past Presidents J. F. Ingram, Mark Nichols and Frank C. Moore (above). Below, Dr. London, r., chats with program participants, international educators session, in Chicago. Franklin J. Keller is at l., R. B. Bradley of Canada is at Dr. London's right.

training is provided should be enrolled in these programs. Enough workers should be trained to meet the needs of the labor market, no more.

Another great need in the field of industrial education is for expanded adult programs for *apprentices, journeymen,* and *technicians.* Here we must have much closer working relations with labor-management groups than we have had in the past. This, of course, presents a great challenge in the recruitment and training of teachers. Still another problem in some states and local communities is that of closer cooperation between industrial arts and vocational-industrial education.

MOST OF the high schools of the nation offer some form of business education. Of the 40 to 50 thousand teachers in this field, less than 500 are members of the AVA. Skilled secretarial and office workers are in great demand almost everywhere. Aside from its vocational values, business education has great value for personal use, to provide consumer knowledge, and to aid in understanding our economic system.

The job of meeting the need for these workers should provide a real challenge to people who teach in this area. Some critics of this program contend that a good portion of the equipment used is obsolete and needs to be modernized. Adequate funds would help here. Certainly, the program is no place for students of low ability, for efficient office workers must have intelligence.

ONE OF the everlasting problems of our mass-production economy is the distribution of the multitude of goods and services produced. Distributive education, therefore, is essential in our day. Its purpose is to prepare workers for efficiency in the merchandising occupations. This phase of our program needs to be greatly expanded in most communities.

With the development of area vocational schools and continued expansion of adult education, the outlook for distributive education in the next decade should be good. As is the case with trade and industrial education, one of our major problems in the DE field is that of recruiting, training and keeping enough well-qualified teachers.

Many distributive occupations pay low wages, and it seems to me that the public schools have an obligation to assist in the upgrading of these jobs. Effective training should do just this, because it should result in more efficient workers and hence a justification for higher wages. The program should aid the businessman also, by providing more efficient employees. Another real challenge in this area of vocational education is to keep it from becoming *identified with* and the *servant of hucksterism,* rather than the welfare of the workers, legitimate business, and the consuming public. Administrated prices and predatory advertising must serve as warning signals to teachers of distributive education. We must have no part of these. In an economic struggle between prices, profits, and wages, tax supported DE must be responsible first, last, and always to the public welfare. This is the first principle of DE. We should drive a stake down here and paint it in a color that will glow in the darkest night.

ALTHOUGH THEY are not listed as part of the labor force, homemakers constitute the largest single occupational group in America, and I suppose the ladies would want me to add that all of us are involved in home and family life, to some extent. Unlike the other phases of vocational education, it would be impossible to enroll too many women and girls in this program or to have the training misfire. As a sophomore in college I took a course in foods and another in clothing. As it turned out, in subsequent years, these became factors in my domestication! Except for this, I could make a strong case for boys and men being subjected to the civilizing experiences of home economics!

I hear and read some about the tendency for home economics to take over art and the social studies, to the neglect of other things they might better be doing. Maybe this is not altogether undesirable, for I am sure that no other phase of education personalizes education for girls to the extent that home economics does. Even so, it seems to me that you women who work in this area would be smart to emphasize and claim as your sphere those things which are unique contributions of home economics. If you do not do these things, then they won't be done in education.

FINALLY, let me make a few remarks about vocational guidance and the challenge which the future holds for it.

If we take the present distribution of workers and the estimated future need by occupational families, on the one hand, and on the other hand, the number of available workers, their occupational choices and competencies, *we find that the two are miles apart.* The 60 million dollars earmarked for guidance purposes in the National Defense Education Act were included in order to correct the great imbalances existing between our labor supply and demand. If this is to result, counselors must rid themselves of the so-called "non-directive" approach and take *positive steps* to *guide youth, in conference with their parents,* into occupations *on the basis of the needs of the labor force* as well as the *interest* and *ability* of the individual. This means, of course, that counselors *must keep up with the labor market,* and they must understand the philosophy and purpose of vocational education.

Counseling that *does not involve the parent, which accepts no responsibility* for balancing labor supply and demand, and which ignores the true purpose of vocational education, will not meet the needs of our time. In the final analysis, vocational guidance must be evaluated in terms of the contribution it makes to a balance between labor supply and demand, the alleviation of occupational maladjustment on the part of the individual, and the optimum utilization of human resources.

What our practical arts and vocational education programs sorely need, what this country must have if we are to hold our own in the economic struggle with Russia is a *more realistic approach* to the whole program of manpower management, which centers, I believe, in a realistic program of vocational guidance and vocational education in our high schools and colleges.

IN CONCLUSION, let me reiterate: we have come a long way in the practical arts and vocational education. Despite the criticisms made against these subjects by people who are either uninformed or unsympathetic, these types of education are here to stay. We have our problems, of course, and we must face them squarely!

KANSAS SCHOOL ADMINISTRATORS

Take a Look at Vocational Education

By R. J. Agan

IF LOCAL SCHOOL administrators were to set the basic principles for the operation of programs of vocational education in the public schools, would they change them much from those in current operation? Seventy-two school administrators in Kansas indicated that few, if any, changes would be made. The administrators were selected by a sampling from the list of public schools where vocational education was deemed successful by the supervisory staff of the Kansas Board for Vocational Education.

The administrators of the successful departments of vocational education averaged 10 years of tenure in their present positions with an average of 26 years in school work. With seven exceptions their professional training had not included courses in the area of vocational education. Four of the seven had entered the field of administration as teachers in one of the areas of vocational education, leaving three who had taken courses as a part of their educational preparation for school administration.

From the information supplied by the school administrators during interviews with supervisors or teacher educators seven principles were developed for the efficient operation of vocational education within a public school system. The principles and the responses given by the administrators follow:

Principle 1: Vocational education courses are offered on an elective basis to students of all socio-economic backgrounds and intellectual abilities.

All 72 school administrators responded that the program of vocational education was desirable in their school, 47 (65 per cent) rating it as highly desirable. Nearly all, 71, stated that they currently did not counsel students of the lower socio-economic backgrounds into vocational education courses; and 69 per cent said that they felt such counseling would be undesirable. Seven of the 72 administrators stated that they were currently counseling students with IQ's in the upper 25 per cent against taking vocational education; however, two-thirds of the administrators said that they felt such counseling was undesirable. Ten administrators indicated that they currently counsel students who are preparing for college against taking vocational education courses, however, 57 per cent said that such counseling seemed to them to be undesirable, with 14 of the administrators classifying it as highly undesirable.

Principle 2: The per pupil cost of vocational education is higher than other programs in the public school due to special equipment, travel cost of teacher supervision of off-campus training activities, and enrollments per class not exceeding 20 pupils. The results of the program, however, justify a higher cost.

Not all school administrators agreed that the cost of vocational education was higher, 15 of the 72 responding that currently such was not the situation in their schools. A majority, 79 per cent, did feel that the cost was higher, and 81 per cent of these administrators felt that the current program of vocational education offered in their schools justified the higher cost. A question was asked specifically about the local school's responsibility to pay the travel cost for teacher supervision of pupil's work in off-campus vocational education activities. Eighty-one per cent of the administrators said that they currently paid the expenses of teacher supervision of pupil's work in off-campus vocational education activities. Forty-six of the 72 administrators felt that such an arrangement was or would be desirable in their local school programs of vocational education.

Principle 3: The public school promotes adult training in the local community as a part of the vocational out-of-school or evening school program.

Ninety per cent of the school administrators endorsed this principle as desirable, 19 of the 72 rating it as highly desirable. Slightly less than half, 35 of 72, actually had such programs in operation in their schools. Six administrators felt such programs to be undesirable.

Principle 4: Proportionally, more annual salary is paid to vocational teachers who are on the job extra months than to the teacher who is on the job nine months. The same monthly rate prevails for vocational teachers as for other teachers having equal qualifications.

A majority of the administrators agreed to the desirableness of this principle. Sixty of the 72 administrators felt it desirable to pay the same monthly rate for vocational teachers as for other teachers, 74 per cent having such a salary schedule in current operation in their school. Sixty-two of the 72 said that the vocational teachers currently receive more salary because of their extra months on the job and all 62 felt it to be a desirable plan.

Principle 5: An effort is made to help the academic teachers understand and appreciate the need for vocational education.

Mr. Agan is Associate Professor, Kansas State University.

Kansas School Administrators

(from page 23)

All but four of the 72 administrators felt that this principle was a desirable practice in their school. The four did not indicate that they felt such an effort to be undesirable but withheld their response to the question. Sixty-five of the 72 administrators said that such a plan was in current operation in their school.

Principle 6: A cooperative agreement between the State Government and the local school district is a basis for the educational program in vocational education. Under such agreement vocational education is financed in part, from federal funds and the State Board for Vocational Education offers professional advice as to the facilities, minimum time alloted for classes, and other instructional needs used for vocational education to determine whether they are adequate.

Ninety-four per cent of the school administrators favored a cooperative agreement such as outlined in this principle. Eighty-nine per cent felt it also desirable for a cooperative agreement to exist between the State and Federal Government relating to vocational education. Sixty-two administrators felt it desirable to receive federal funds to be used in partial support of vocational education; seven felt it undesirable and three withheld their responses.

As to professional advice offered by the State Board concerning facilities and instructional needs for vocational education, 96 per cent of the administrators felt it to be a desirable part of the program, 36 per cent feeling it to be highly desirable. A slightly smaller number (86 per cent) felt it desirable for the State Board for Vocational Education to determine minimum time standards for classes of vocational education. Eight administrators felt this practice undesirable.

Principle 7: Vocational education is a part of the total educational program of the student in the secondary school.

There was unanimous agreement among the 72 administrators as to the desirableness of vocational education being a part of the total educational program of the school. Forty-two per cent stated that they felt it to be a highly desirable part of the secondary school program.

Projects or What?

(from page 14)

think, create, make sketches and construct or assemble an article of quality. It is important that teachers determine the individual needs of students and tailor the project to meet these needs.

CONSIDERING THE total learning situation an important point often overlooked is the ability of the teacher. It should be remembered that all teachers are not cast in the same mold and that their interests, abilities and drives vary similarly to those of the students they teach. Teachers will be successful in using the project as a vehicle of learning in direct proportion to their interests, abilities and understandings. Students under teachers with little interest or imagination may do little more than perform work with tools and materials in a slipshod and desultory fashion while other students under more alert teachers may be led to think of their project in relation to industry and technology; also in terms of science, mathematics, art and other subjects; in short, in terms of general education. The same teachers probably would be no more successful or unsuccessful if some other term, method or device were substituted for the word "project".

MUCH OF the criticism of the word "project" as an archaic and narrow method of teaching industrial arts probably stems from semantics. If teachers think of the project in terms of investigating, planning, drawing, designing, fabricating and reference reading, in other words as a means to an end rather than an end in itself, it appears that the project has served us well in general education by meeting such needs of youth as physical activity, personal ownership, curiosity, experimentation and research. As long as students are motivated by such needs, the project will undoubtedly continue to be the heart or focal point of industrial arts.

The Area Vocational Program Boom in North Carolina

(from page 13)

IT DOESN'T TAKE *much skill to hit the ground with a rifle; with the same thought in vocational education, we should aim high in planning our program.*

INDUSTRIAL EDUCATION *is an investment—not an expenditure. Properly located, it will put more dollars in the tax structure than it takes for operation.*

QUALITY IS THE *only enduring characteristic of our program. It will outlive the buildings, equipment, and other single contributing factors in a situation of learning.*

Other outside consultants who are also active in our venture are Dr. Nelson Murbach, New York; Don Pound, Indiana; Lynn Emerson, Arthur Wrigley, Merle Strong, U. S. Office of Education; and Mel Turner, Automotive Service Industry Association; to mention a few.

The Automotive Service Industry Association gave us a great deal of help through Mel Turner working with the North Carolina Chapter. We are building 13 new automotive shops in 13 new area schools, and Mel Turner has assisted in planning each shop. We are spending about $29,000 for automotive equipment in each shop and during this year will spend about $400,000 for automotive equipment alone. Many of our people hardly know what a dynamometer is supposed to do, but we will have at least one in each area school. We believe we will lead the industry into utilizing this caliber of equipment. We have found the dynamometer as most other high types of equipment an essential item for a good instructional program in auto mechanics. Thanks to the vision of our good consultants.

Mel Turner has visited our state and met with our superintendents of schools, and the classic remark we remember Mel telling our local superintendents was:

"You people aren't training enough auto mechanics to fix the teachers' cars in the public schools."

This year, Mel, we have 580 young men enrolled in auto mechanics as compared with 60 last year. We hope to offer upgrading classes to about 1,000 auto mechanics by next year.

THE AUTOMOTIVE SERVICE Industry of North Carolina has taken a lead in several other important things. Their members have been among the leading workers in several of our bond elections. They have served as curriculum committeemen and helped us find qualified teachers. They have donated equipment and helped publicize our upgrading classes. They have contributed to our state in developing an Independent Garage Owners Association and this group is sending its mechanics to our schools for advanced instruction.

Report of the Executive Secretary

By Dr. M. D. Mobley

DURING 1959 YOUR AVA made much progress as a professional organization. The brief report that follows deals with only a few of the Association's many accomplishments and activities.

PROBABLY the biggest single activity of AVA is the staging of the annual convention. Let me give you a few statistics.

The official program booklet for 1959 contains 128 pages. A total of more than 600 persons participated in the 154 scheduled programs. Meal functions totaling 34 were scheduled. A total of 150 booths of exhibits were displayed, with 120 companies participating.

During the past 53 years the annual vocational conventions have played a tremendous role in shaping our nation's program of vocational and practical arts education. They have provided a forum where vocational and practical arts personnel have discussed common problems, exchanged ideas and, through democratic processes, established high standards and wise policies and set important goals. The conventions have forged a solidarity among vocational and practical arts personnel which makes AVA one of the most influential education organizations in the United States.

NEXT TO THE annual national convention, producing the AMERICAN VOCATIONAL JOURNAL requires more hours of work than any other activity of your AVA. From its beginning the JOURNAL has kept AVA members up to date on developments in each of our several fields. It has been a great influence in American education. More and more, its pages are quoted in other publications throughout the nation.

Beginning with the February, 1960, issue, the JOURNAL will regularly offer an additional four pages to be alternately devoted to the various divisions within the AVA. We believe this will add to the JOURNAL's quality and enhance its value to every individual member of the AVA.

During the last year there has not been a single month that we have not had orders for reprints or requests to reprint one or more articles from the JOURNAL. Some of these reprints have been widely distributed among people who are not AVA members. This has resulted in thousands of lay citizens, and educators outside our fields receiving literature that will help them to understand the value and place of vocational and practical arts education.

MOST OF THE professional and other work of your AVA is carried on by committees. At present we have 38 general, divisional and special AVA committees. Each of these makes an annual report to your AVA Executive Committee of accomplishments and future plans. The work of these Committees forms the backbone of AVA's professional program and activities. Time will not permit me to discuss the work, accomplishments and activities of each of these committees, but I would like to mention briefly a few.

ONE IMPORTANT and functioning AVA committee in recent years has been the Research and Publications Committee. Gilbert G. Weaver of New York City has for a number of years served as Chairman of this committee and has devoted many, many hours to the development of publications of great professional value to vocational and practical arts educators. These bulletins have been distributed to thousands of people through the length and breadth of our land. They have played an important role in strengthening the quality of vocational and practical arts education in our schools.

Since our last convention your AVA through the leadership of the Research and Publications Committee, has published five bulletins, including the very popular *Area Vocational Programs.* This came from press at an appropriate time—soon after Congress had approved the area vocational education measure. Vocational officials everywhere were eager for authentic information on what to do to inaugurate area programs. This bulletin served a most useful purpose.

The latest bulletin *Developing Education Specifications for Vocational and Practical Arts Facilities*—a joint activity of your AVA and the American Institute of Architects—has just been published. We believe it will fill a great need. It will be of tremendous value to educators and to architects in developing education specifications for vocational and practical arts facilities. Some of America's top authorities participated in its production. Special commendation must go to W. K. Dunton, Chairman of the joint committee that produced the manuscript, for his tremendous efforts.

Your AVA has never tried to make money on its publications. They are published as a service to vocational and practical arts educators, to encourage high standards and to promote developments and improvements.

WE ARE HAPPY to inform you we have again had an increase in membership in the AVA for the year ending November 30, 1959. Your AVA membership committee has played an important role in this accomplishment.

Though we are proud of the membership increase, I would be derelict in my duty were I not to tell you that there are still thousands of vocational and practical arts educators who are not AVA members. In fact, many of them are not members of any professional organization. I sometimes wonder how they expect to grow in their profession.

Presented here are excerpts from the report of the Executive Secretary, Dr. M. D. Mobley, to the House of Delegates of the Association, Chicago, December 10.

EVERYONE SHOULD READ "VOCATIONAL EDUCATION IN RURAL AMERICA"

The future of vocational and practical arts education depends in large measure on the success we have in maintaining functioning state vocational associations and a strong AVA—with a high per cent of those eligible as members.

The programs in which we are engaged are under attack by many uninformed and misguided people. No one can deny this. If we are to protect these programs, so vital to our nation, we must pool our resources and work together to acquaint lawmakers, administrators and the public in general with the importance of our work and the vital role it plays in our security and economic well being. We cannot do this as individuals. We must do it through organized effort. Our first step is to maintain sound effective programs. A weak, ineffective program cannot and should not be defended.

We hope that every vocational and practical arts worker, who is interested in protecting and improving his profession, will in the months and years ahead devote part of his efforts and energy to the strengthening of his professional organizations at the state and national levels.

AS ONE STEP in the effort to combat unfavorable publicity about vocational and practical arts education and the unwarranted attacks being made on the programs, your AVA established about 18 months ago the Public Information Committee with Dr. H. M. Hamlin of Illinois as Chairman. It is gratifying, indeed, to inform you that this committee is doing an excellent job. You will be hearing more and more about it.

Officials of the Sears Roebuck Foundation were so impressed with this committee's plans, that during the year the Foundation made a $4,000 donation for the committee to launch its work. We have reason to believe that a similar amount will be donated for each of the next two years.

DURING 1959, the very splendid yearbook of the Department of Rural Education of the NEA devoted to *Vocational Education for Rural America* was completed and is now available. A special AVA Committee headed by Dr. Gordon I. Swanson of Minnesota, who was editor, played an important part in its production. In my estimation this splendid book will prove of great value to vocational and industrial arts education. May I urge each of you to buy a copy for your own use and other copies for gifts to school board members and school administrators. The value of this book to our programs depends on how many people read it.

AVA SPONSORED a very successful *National Conference on Research for Vocational and Practical Arts Educators* last October. The three day conference in which office of education officials cooperated wholeheartedly, was held in Washington. Approximately 40 vocational and practical arts educators from more than 20 states attended.

We have heard nothing but praise of this conference. We hope and believe it will result in a great increase in research in the fields of vocational and practical arts education.

FIVE WORKSHOPS for officers of affiliated associations were held in '59. These were conducted by Lowell A. Burkett, Assistant Executive Secretary of the AVA. A total of 120 people representing 21 states participated in these workshops. Many have commented favorably on the value of these workshops in strengthening your AVA and state vocational associations.

During the year your Executive Secretary and Assistant Executive Secretary have made 39 major speeches in more than 30 states to state associations and other groups. Copies of the speeches were mimeographed and widely distributed in some of the states where they were made. One speech was inserted in the *Congressional Record* by a prominent Congressman.

REPRESENTATIVES of AVA partici-pated in 32 major conferences, some national in scope and involving a number of large organizations. This has resulted in thousands of influential people learning of the work of AVA and its members.

A total of 25 AVA committees or committees on which AVA was represented met during the year to deal with a multiplicity of activities being promoted or sponsored by your AVA. More than 20 groups of foreign visitors to this country visited your AVA Washington office and conferred with staff members.

Your Washington staff and representatives of AVA participated in the meetings of many special and important groups during the year such as three meetings of The Conference of National Organizations (made up of representatives of 29 National Organizations whose total membership totals more than 50 million); American Association of Secondary School Principals; American Association of School Administrators (with which group AVA has for the past several years co-sponsored discussion programs); President's Committee on Employment of the Physically Handicapped; American Council on Education; President's Occupational Safety Conference; The As-

WE CAN NEVER RELAX IN OUR EFFORTS TO JUSTIFY FINANCIAL SUPPORT

sociated General Contractors and many others representing organized labor and management groups.

During 1959 your AVA office handled approximately 35,000 pieces of incoming mail. This called for an enormous amount of time and effort, as we are asked for information on many, many subjects.

We sent out from the AVA office in 1959 a total of more than 60,000 pieces of mail—not including the JOURNAL and bulletins. Our correspondence covered many subjects—going to every state and to more than 30 foreign countries.

AVA REPRESENTATIVES testified before three Congressional Committees during the year and officers and Committee members held numerous conferences with members of Congress on matters involving vocational education. When Congress is in session there are few days that pass without a call from some member of Congress requesting information about vocational education or help in preparing a speech on education. Much effort and time are put into this kind of service.

Your AVA Washington office and officers of the association were responsible for a number of articles that appeared in education magazines with national circulation.

A splendid article by Past President London appeared in the *American School Board Journal*. Dr. Hamlin was responsible for an excellent article in *The Nation's Schools*. These are only two of the many articles about vocational and practical arts education that have appeared in national magazines recently.

These features help to keep officials, who make the decisions on school offerings, informed of the need for expanding and improving vocational and practical arts education and of the new developments. They benefit all who engage in these fields of education because they help to create favorable attitudes for vocational and practical arts education among those who control our school programs.

VOCATIONAL EDUCATION had another successful legislative year. Congress appropriated a total of $47,840,000 for vocational education, an all-time high. This was done in spite of the fact that President Eisenhower again (in 1959) recommended that all federal vocational education acts be repealed. Congress ignored the request. No bill was introduced to carry out the President's request as was done in 1958.

Every year since 1951 there has been a recommendation by the President's Budget Bureau to cut federal appropriations for vocational education or to repeal the acts and thus eliminate all the funds. During this same period, Congress has increased the authorization for vocational funds by more than 70 per cent and has increased the appropriations under provisions of the George-Barden Act by almost 120 percent. This speaks louder than words in depicting the continuing interest of our National Congress in vocational education.

We hope Congress will continue its traditional support of vocational education in 1960.

During the past several months there has been much controversy over the so-called Bush amendment to the Area Vocational Measure. This amendment, which was offered on the floor of the Senate by Senator Bush of Connecticut, limits the use of funds to the training of "highly skilled technicians"—essential to National Defense. Many individuals, groups and organizations including your AVA Executive Committee, are now on record calling for amendments to the law that would make it legal for the funds to be used on a more comprehensive basis for all phases of vocational education. I shall not deal with this matter at length, as I have already discussed it in some detail in my JOURNAL column and in other releases.

During the last congressional session, P. L. 380—86th Congress became law. It provides for a 25-member *Advisory Commission on Intergovernmental Relations* to—among other things—study and make recommendations involving Federal Grant in Aid programs. In time this commission will in all likelihood investigate grants for vocational education and make recommendations that may involve their continuance or discontinuance. The Commission has not yet been appointed but will be soon.

IT SEEMS we can never relax our efforts to justify financial support for vocational education. If we should ever relax, even for a brief period, there would be no federal funds for vocational education. In general, the same is true at state and local levels.

Often, I encounter vocational personnel who seem to think that financial support for vocational education is like "Manna" from Heaven. They do not realize that many individuals, groups and organizations take appropriate action and thus make needs known to lawmakers who have the power to make funds available. It is not a simple matter and cannot be accomplished except through group action. By this, of course, I mean individuals within a group or organization agreeing on what is needed and then, through their chosen leaders, making needs known to lawmakers and administrators.

There's lots of membership participation in AVA affairs

INDEX to Volume 34, January-December 1959

Agricultural Education

Buyers Guide ---- p. 27, Sept.
Georgia's Area Teachers by T. G. Walters ---- p. 20, Oct.
The Nation Must Have Farmers by John W. Bunten ---- p. 25, Mar.
Placement for Farm Experience Develops Skilled Laborers by Hugh J. Ripper ---- p. 20, Feb.
Plots and Plans by Donald B. Pfleiderer ---- p. 21, Jan.
Training for Non-Farm Agricultural Occupations by H. W. Sanders ---- p. 22, May
What Happens to Vo-Ag Graduates by J. J. Butler ---- p. 23, Dec.

AVA

AVA Efforts Push Tools for Schools ---- p. 6, Sept.
AVA Makes Plans to Inform the Public by H. M. Hamlin ---- p. 22, Mar.
Claude to Head AVA ---- p. 20, Apr.
1959 Commercial Exhibitors ---- p. 29, Nov.
For AVA President ---- p. 7, Feb.
The Journal Applauds State Officers ---- p. 26, May
Official AVA Committees ---- p. 29, Jan.
Program of Work 1959 ---- p. 24, Jan.
See You in Chicago ---- p. 16, Oct.
See You in Chicago ---- p. 14, Nov.
Treasurer's Report, 1958 by Charles W. Sylvester ---- p. 20, Jan.

Business Education

Business Education at the Junior College Level by R. C. Van Wagenen ---- p. 24, Dec.
Business Education Buyers Guide ---- p. 30, Sept.
The Facts about Business Education by William Selden p. 23, May
Learn from Those You Teach by Bernadine Meyer ---- p. 9, Jan.
The Relationship of Office Standards to Business Training by Dean R. Malsbary ---- p. 22, Oct.

Distributive Education

Career Opportunities in the Retail Food Industry by Charles Pappas & W. Fred Totten ---- p. 24, Feb.
Distributive Education Buyers Guide ---- p. 31, Sept.
The Facts about Work Experience Programs by James B. White ---- p. 18, Oct.
Going Up by H. R. Cole ---- p. 16, Jan.
Good Guidance through Career Days by William Speary ---- p. 21, Dec.

Editorials

Jesse T. Anderson ---- p. 9, May
R. D. Anderson ---- p. 10, May
Ralph G. Brooks ---- p. 8, Dec.
M. A. Browning ---- p. 9, Feb.
Price Daniel ---- p. 8, Feb.
Freeman B. Decker ---- p. 9, Dec.
J. W. Edgar ---- p. 9, Feb.
Ernest F. Hollings ---- p. 9, May
F. J. Konecny ---- p. 20, Dec.
Herman N. Miller ---- p. 18, Sept.
M. D. Mobley p. 7, Jan.; p. 5, Feb.; p. 7, Apr.; p. 5, May; p. 7, Sept.; p. 7, Oct.; p. 10, Nov.; p. 5, Dec.
E. M. Olivier ---- p. 25, Sept.
Frank Reinhart ---- p. 15, Sept.
Albert D. Rosellini ---- p. 15, Sept.
Cecil E. Stanley ---- p. 9, Dec.

General Vocational

Audio-Visual Buyers Guide ---- p. 26, Sept.
Book Publisher's Buyers Guide ---- p. 26, Sept.
The Enemy Unseen by Melvin L. Barlow ---- p. 10, Jan.
Implications of Automation by Harold H. Punke ---- p. 26, Dec.
Indiana's Sold on Vo-Ed by Ralph R. Bentley and Frank J. Woerdehoff ---- p. 21, Apr.
The Journal Salutes Industry ---- Apr.
The Journal Salutes Kentucky ---- p. 8, Mar.
The Journal Salutes South Carolina ---- p. 9, May
The Journal Salutes Texas ---- p. 8, Feb.
The Journal Salutes Washington State ---- p. 15, Sept.
Job Counseling, Tailored-to-fit by Thomas A. Routh ---- p. 19, Jan.
Live Exhibits Bring Life Training to Life ---- p. 18, Apr.
Skills Are Not Enough by Richard E. Morley ---- p. 21, Feb.
Program Planning by Ralph J. Woodin ---- p. 22, Mar.
What about the IQ by William H. Knight ---- p. 23, Nov.

Home Economics

The American Home by Walter R. Courtenay ---- p. 22, Nov.
Boys Feel at Home in Homemaking by Marion Hurst ---- p. 25, May
Cleveland Shows us How by Jane C. Rohrbach ---- p. 10, Oct.
Home Economics Buyers Guide ---- p. 31, Sept.
Let's Not Forget the Girls by Margaret Booher ---- p. 27, Feb.
Nine Steps to Success in Home Experience Programs by Laura E. McAdams ---- p. 12, Oct.
Teaching by Tea—V (at 3) by Priscilla Rugg ---- p. 26, Mar.
You Are in an Enviable Position by R. E. Bass ---- p. 30, May

Industrial Arts

How Do You Build Industrial Arts Enrollment by M. J. Ruley ---- p. 19, Dec.
IAPPC Cabinet Meets ---- p. 17, Apr.
Model Rocketry in Education by Leo. F. Kuhn ---- p. 9, Oct.
The Place of the Project in Industrial Arts by Ralph C. Bohn ---- p. 18, Dec.
Productive Maintenance Clinics by Ronald B. Thomas ---- p. 28, Mar.
A Statement of Industrial Arts in Education by Industrial Arts Policy and Planning Committee ---- p. 18, Nov.
Teacher Evaluation by E. A. Curry ---- p. 22, Jan.
Theory and Practice by B. C. Tinnell ---- p. 22, Feb.

Trade and Industrial

Better Mind the Why and Wherefore of Industrial Operations by Howard O. Meuche, Jr. ---- p. 23, Apr.
Help Wanted in the Skilled Crafts by Jack Kleinoder ---- p. 10, Apr.
Vo-Ed Helps Study Pilot Test City ---- p. 31, May
T and I Buyers Guide ---- p. 32, Sept.
Potential Supervisors Have Opportunities to Develop by Margaret Troxell ---- p. 23, Oct.
The Medical Assistance Program by Theresina B. Thompson ---- p. 28, May
Louisiana Trains Highway Supervisors by Harry Armstrong ---- p. 15, Oct.
Industrial Education for Today and Tomorrow by Joseph T. Nerden ---- p. 15, Apr.
Cooperative Action against the Machinist Shortage by Harry A. Williams ---- p. 14, Jan.
Why Not Emphasize the Laboratory Problem? by Robert E. Jelinek ---- p. 25, Nov.

Index to Authors

Jesse T. Anderson ---- p. 9, May
R. D. Anderson ---- p. 10, May
Harry Armstrong ---- p. 15, Oct.
Melvin Barlow ---- p. 10, Jan.
R. E. Bass ---- p. 30, May
Ralph R. Bentley ---- p. 21, Apr.
Ralph C. Bohn ---- p. 18, Dec.
Margaret Booher ---- p. 27, Feb.
Ralph G. Brooks ---- p. 8, Dec.
M. A. Browning ---- p. 9, Feb.
John W. Bunten ---- p. 25, Mar.
J. J. Butler ---- p. 23, Dec.
H. R. Cole ---- p. 16, Jan.
Walter R. Courtenay ---- p. 22, Nov.
E. A. Curry ---- p. 22, Jan.
Price Daniel ---- p. 8, Feb.
Freeman B. Decker ---- p. 9, Dec.
J. W. Edgar ---- p. 9, Feb.
H. M. Hamlin ---- p. 22, Mar.
Ernest F. Hollings ---- p. 9, May
Marion Hurst ---- p. 25, May
Robert E. Jelinek ---- p. 23, Nov.
Jack Kleinoder ---- p. 10, Apr.
William H. Knight ---- p. 23, Nov.
F. J. Konecny ---- p. 20, Dec.
Leo F. Kuhn ---- p. 9, Oct.
Dean R. Malsbary ---- p. 22, Oct.
Laura E. McAdams ---- p. 12, Oct.
Howard O. Meuche ---- p. 23, Apr.
Herman N. Miller ---- p. 18, Sept.
M. D. Mobley ---- p. 7, Jan. p. 5, Feb.; p. 5, Mar.; p. 7, Apr.; p. 5, May; p. 7, Sept.; p. 7, Oct.; p. 10, Nov.; p. 5, Dec.
Richard E. Morley ---- p. 21, Feb.
Bernadine Meyer ---- p. 9, Jan.
Joseph T. Nerden ---- p. 15, Apr.
E. M. Olivier ---- p. 25, Sept.
Charles Pappas ---- p. 24, Feb.
Donald B. Pfleiderer ---- p. 21, Jan.
Harold H. Punke ---- p. 26, Dec.
Frank Reinhart ---- p. 15, Sept.
Hugh J. Ripper ---- p. 20, Feb.
Jane C. Rohrbach ---- p. 10, Oct.
Albert D. Rosellini ---- p. 15, Sept.
Thomas A. Routh ---- p. 19, Jan.
Priscilla Rugg ---- p. 26, Mar.
M. J. Ruley ---- p. 18, Dec.
H. W. Sanders ---- p. 22, May
William Selden ---- p. 23, May
Cecil E. Stanley ---- p. 9, Dec.
Charles W. Sylvester ---- p. 20, Jan.
Ronald B. Thomas ---- p. 28, Mar.
Theresina B. Thompson ---- p. 28, May
B. C. Tinnell ---- p. 22, Feb.
W. Fred Totten ---- p. 24, Feb.
Margaret Troxell ---- p. 23, Oct.
R. C. Van Wagenen ---- p. 24, Dec.
T. G. Walters ---- p. 20, Oct.
James B. White ---- p. 18, Oct.
Harry A. Williams ---- p. 14, Jan.
Frank J. Woerdehoff ---- p. 21, Apr.
Ralph J. Woodin ---- p. 22, Mar.

From the U. S. Office

"Women in a Space Age" was the subject of an address given by Mary S. Resh, Program Specialist, Trade and Industrial Education Branch, at the annual Vocational Information meeting of the Detroit Altrusa Club on January 20. Guests included representatives of other women's service clubs in the Detroit area.

* * *

The February 1-2 meeting of the National League for Nursing Committee on Revisions of Practical Nursing Publications was attended by Helen K. Powers, Program Specialist for Practical Nurse Education, Trade and Industrial Education Branch. Discussion centered on the revision of "Practical Nurses in Nursing Services," a publication prepared in 1951 by the American Nurses Association to clarify the role of the practical nurse in caring for patients, her duties, and her limitations. The need has been expressed for an up-to-date publication that will continue to serve this purpose.

* * *

During the week of October 18-22, John P. Walsh, Director, Trade and Industrial Education Branch, participated in three conferences in Chicago. At the conference of the National Safety Congress, he presented a tentative report of the Office of Education's national conference on "The School's Contribution to Occupational Safety." He also assisted this group in pre-planning some of the elements of the 1960 President's Conference on Occupational Safety. At a joint meeting of the AVA Policy and Planning Committee and representatives of the Sears Roebuck Foundation, Dr. Walsh participated in planning for the production of a film on *This is Trade and Industrial Education*. In addition, he served as consultant at a meeting of the Planning Committee for the 1960 Central Regional Conference.

* * *

The Research and Special Studies Committee of the North Atlantic Region had the consultative services of Mary S. Resh, Program Specialist, and Merle E. Strong, Specialist in Teacher Training and Service Studies, Trade and Industrial Education Branch, at a meeting in New York City on October 19. Progress on research studies being conducted in the region was reviewed.

* * *

Margaret Alexander, Program Specialist, Home Economics Education Branch, served as one of seven consultants at a college curriculum conference at Mansfield, Pennsylvania, State Teachers College on September 9-10. She spoke to the group on the College Curriculum in Home Economics Education.

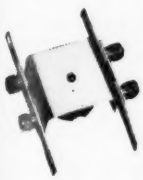
* * *

At a meeting in Bristol, Virginia, on September 27-29, E. G. Ludtke, Program Specialist, Trade and Industrial Education Branch, conferred with State Supervisors of Trade and Industrial Education from Virginia, North Carolina, South Carolina, and Tennessee, and assisted in developing plans for an inter-regional conference to be held in March.

* * *

The Distributive Education Branch, represented by George Sanders, Program Specialist, maintained an exhibit booth at the annual convention of the National Paint, Varnish, and Lacquer Association, Atlantic City, October 19-21. He also participated as consultant in a general session devoted to procedures for starting and conducting sales training programs using *Hidden Power* materials, the teaching suggestions for which were prepared by Mr. Sanders.

—WOODSHOP INSTRUCTORS—
Have you heard about
Magna-Set?



U.S. Pat. No. 2,589,865

• • • • • • *the magnetic Jointer and Planer knife-setter that is rapidly outmoding and replacing the old, mechanically inaccurate, time-consuming straight-edge method!*

The necessity of tapping, prying and re-adjusting is entirely eliminated! Thousands now in use! Write for complete information and name of your nearest distributor.

MAGNA-SET COMPANY Dept. VJ
632 NEW HAVEN AVE., MILFORD, CONN.

Electricity-Electronics teachers agree...
CROW COURSES ARE SOMETHING TO "CROW" ABOUT!

You'll actually **enjoy** teaching electricity and electronics when you use these revolutionary Crow courses, even if it isn't in the field of your specialty.

You don't need a technical background to use them!

Graduate work in mathematics, physics, and electronics is helpful, of course, but not necessary. Just send for our FREE booklet, "Programs for Teaching Electricity – Electronics", and select the course that's custom-tailored for **your** classes.

Each unit comes complete with text, instruction manuals, student experiment equipment, instruction sheets and power supplies.

Programs available for students from elementary school to college age.

WRITE NOW, TO:

CROW
UNIVERSAL SCIENTIFIC CO., INC.
BOX 330 VINCENNES, INDIANA

associations and People

Claudius Wilken, 41, former general metal shop teacher at Monroe high school, was recently appointed Supervisor of Industrial Arts for the St. Paul public school system, replacing **Benjamin Brynildsen,** who retired after 32 years with the system, 18 as supervisor.

With his new-found time, Mr. Brynildsen is looking forward to some "leisurely traveling" and generally "taking life easy." In the summer time he and Mrs. Brynildsen will most likely be found at their cabin on Big Lake—"and the coffee pot will always be on for visitors," they say.

Mr. Wilken, a native Minnesotan, holds a BS degree from St. Cloud Teachers College. He received his master's degree with a major in industrial arts from the University of Minnesota.

Before taking over his new post, Mr. Wilken taught 11 years at Monroe. Well known for his work in industrial arts at both the state and local level, he was chairman of a Minnesota Industrial Arts Club's State Fair exhibit and for the last three years served as co-chairman of St. Paul's Student Craftsman Fair. He served on both the work and study committees for revision of St. Paul's secondary report card.

"One of the biggest jobs," next to the work done in the shop, for industrial arts teachers and administrators, Mr. Wilken believes, "is to keep members of the school system and the general public informed about the important part industrial arts education plays in modern society."

Mary Catherine Eble has been appointed Supervisor of Homemaking in the New Orleans Public Schools. Miss Eble has been teaching in the New Orleans Public Schools for the past 18 years. She is a native of New Orleans and received her Bachelor of Science degree in Home Economics from Louisiana State University in 1940. In 1954, Miss Eble earned her Master of Science degree at Cornell.

She has done advanced study at Pennsylvania State University and, during the summer of 1958, was a participant in the Ninth Annual Graduate Workshop for Education in Family Finance at the University of Pennsylvania.

The Nineteenth Annual Business Education Conference will convene at The Woman's College of The University of North Carolina, Greensboro, on April 2. *Bridging the Gap from School to Job through a Terminal Course* is the theme. Presiding will be Lenore Pierce, Conference Chairman and member of the Woman's College faculty.

Featured for the meeting are Dr. Peter L. Agnew, Chairman of the Business Education Department, New York University; and Arthur L. Walker, Virginia State Supervisor of Business Education Service, Richmond.

Dr. Agnew and Mr. Walker will present instructional procedures and content appropriate to a dual-purpose course designed to provide terminal training both for stenographic and for non-stenographic or clerical students. The methodology and extent of skill development in the use of office machines as an integral part of such a terminal course will also be considered.

Presented annually as a service to business teachers throughout North Carolina, the Conference is jointly sponsored by the Woman's College Business Education Department, the Commercial Department, and Zeta Chapter of Delta Pi Epsilon.

1960 NVATA Officers Elected in Chicago

Julian M. Carter, vocational agriculture instructor from Wellsville, New York, was elected president of the National Vocational Agriculture Teachers' Association at its eleventh annual convention in Chicago. Mr. Carter has been teaching vocational agriculture for 22 years. He received his Bachelor of Science degree from Cornell University in 1937 and his Master of Science degree from the same institution in 1954. Active in educational associations as well as The Grange and the Cooperative Grange League Federation, he is a Past President of the New York Vo-Ag Teachers Association.

James Wall, vocational agriculture teacher, Waverly, Nebraska, was reappointed Executive Secretary of NVATA. Mr. Wall has served the NVATA as Executive Secretary for one year, as President of the national association, and regional vice president from Nebraska for three years.

Byron Forsyth, vocational agriculture teacher of St. David, Arizona, was elected vice president of Region I which comprises the ten western states of the nation. Mr. Forsyth has served as president of the Arizona Vo-Ag Teachers' Association and was named outstanding teacher in Arizona by Alpha Tau Alpha Phi Chapter for 1958-59. Mr. Forsyth taught at Chandler, Arizona before going to St. David.

Wenroy C. Smith, vocational agriculture teacher of Saltsburg, Pennsylvania, was elected vice president of NVATA for Region VI, which comprises the North Atlantic states. Mr. Smith is active in local, county and state teachers associations, and has served as alternate vice president to the NVATA, past president of the Westmoreland County Teachers Association, and is currently secretary-treasurer of the Pennsylvania VATA.

NEW JOURNAL RATE FOR RETIRED PERSONS

In accordance with formal action of the Executive Committee at the 1959 AVA Convention, members of the organization who have retired from their professional pursuits may subscribe to the JOURNAL at the reduced price of $1.50 per year. Orders should be sent directly to AVA headquarters, 1010 Vermont Ave., N. W., Washington 5, D. C.

WILLIAMSPORT, PA., DEDICATES NEW TRAINING CENTER

The start of a new era for Williamson Free School of Mechanical Trades, Media, Pa., was marked on October 24, 1959 with the dedication of its new center, The John Wanamaker School of Artisans.

Established as a memorial to John Wanamaker, Philadelphia merchant and philanthropist, the new center will enable the school to step up its program and enter the field of post high school training, offering craft-technician courses to boys who qualify. It adds a science building and four shops to Williamson's 35 existing buildings.

Founded back in 1888, Williamson has earned for itself an esteemed reputation among the nation's industry during its 71 year history. Its graduates, trained in basic skills of carpentry, bricklaying, decorating, machinery and power plant, have gone on to become leaders in construction, utilities, engineering, management and other allied professions.

The school's president, James R. Clemens, a graduate of the class of 1934, last year left his position as plant engineer at the Link-Belt Company, Philadelphia, to return to Williamson and institute the new trend. Clemens, in noting that industry today is requiring increasing numbers of craft technicians to serve as liaison between engineers and the trades, pointed out that the Wanamaker technical center enables Williamson to "launch into this new field of trade school training and thus insures the school's future and high position among technical institutions."

The Wanamaker buildings are valued at $800,000 and according to provisions of Rodman Wanamaker's will, John's son, the remainder of the trust is to be reserved as an endowment for salaries, improvements, upkeep, etc. Equipment for the buildings and utility services at a cost of more than $500,000 have been provided by the school. The first John Wanamaker was a close friend of Isaiah VanSant Williamson, founder of the trade school, and was a member of the school's original board of trustees.

Williamson today remains basically the same as when Mr. Williamson established it —for boys between the ages of 16 and 19 who cannot afford to go to college.

Board, lodging and instruction are provided without charge for three years of the school course. Half the student's time is spent in shop and trade work; and half in related academic training. It is accredited by the Pennsylvania Department of Public Instruction as a private secondary school.

At the dedication of the Wanamaker center, U. S. Senator Hugh Scott was principal speaker and cited the school as "a key training ground for the nation's future industrialists." John R. Wanamaker, great grandson of the first John Wanamaker, presented the key to the new center to John A. Diemand, a member of Williamson's Board of Trustees. More than 1000 persons, including members of the Wanamaker Estate Board of Trustees, the school's trustees, faculty, students and alumni, attended the dedication.

GELTZ TO REPRESENT HOME STUDY SCHOOL IN SOUTH

The National School of Forestry and Conservation announces the appointment of Professor Charles G. Geltz of the School of Forestry, University of Florida, as its Southern Regional Educational Counselor. In this capacity, Professor Geltz will represent the School throughout the Southeastern United States, provide direct counseling service to students enrolled in the home study program and will handle the final field examinations for all stuldents within his Region.

The National School of Forestry and Conservation offers three basic home study courses for non-professional field men in forestry, soil and water conservation, and fish, wildlife and recreational area management. These courses are designed to equip field employees of public and private organizations with a practical working knowledge of field practices for duties under the general supervision of professionally trained men. The School is under the direction of Charles H. Stoddard, a widely known professional forester and conservationist.

The School operates a field training camp at Wolf Springs Forest near Minong, Wisconsin, where men who have completed their home study work may obtain on-the-ground instruction in a variety of field techniques. Recently, the School has been accredited by the Wisconsin Department of Public Instruction, approved by the National Home Study Council, and is in process of being recognized by the U. S. Civil Service Commission. It maintains an Extension Office to service its students at 2144 P Street, N. W., Washington 7, D. C.

* * *

The spring conference of the **Western Division of the Pennsylvania Business Education Association** will be held on the campus of the State Teachers College, Indiana, Pennsylvania, April 23.

Approximately 1,500 business teachers have been invited to attend.

* * *

Three new faces have been added to the faculty at the Vocational-Technical School, Trenton, N. J.

Louis Dymond, distributive education, formerly of Wilmington, Del., is a graduate of Villanova University (BS, Economics), the University of Scranton, (BS, Education) and Temple University (M. Ed.). He also attended the New York School of Social Work, University of Connecticut and the University of Delaware and has had a variety of practical experience in retailing as well as teaching and administrative experience in Delaware, Pennsylvania and Connecticut.

William Baxter, guidance and placement, is a graduate of Wooster College who also studied abroad and has acquired a wealth of industrial experience. He has been a member of the faculty and guidance department at Trenton High School for the last 20 years.

Harry P. Roddig, apprentice coordinator, was formerly coordinator at Chester, Pa. He served his trade as a machinist and has a BS and MS in Education from the University of Pennsylvania. He was a machine shop teacher for 15 years

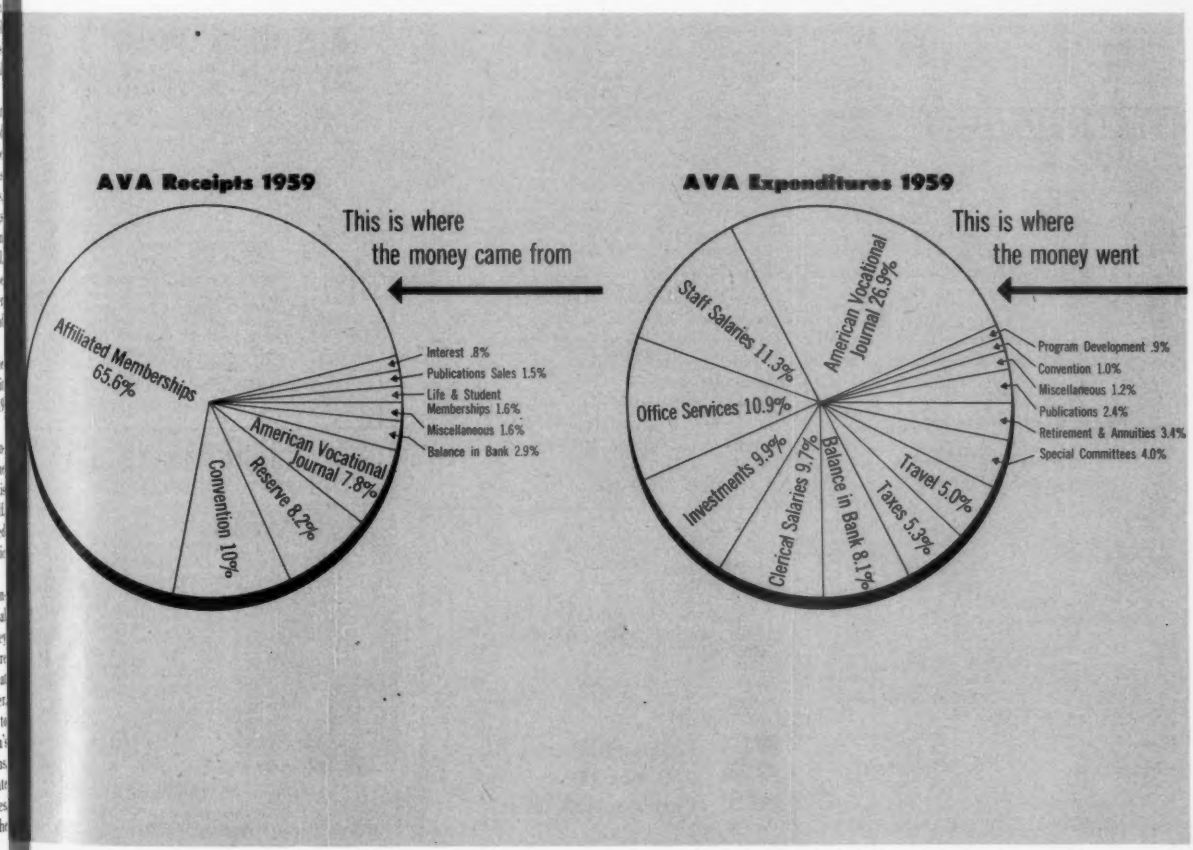
First National Census of Aptitudes and Abilities Under Way

The first national census of aptitudes and abilities of American youth will begin March 1st. It will include a representative sample of 460,000 students drawn from all of the 50 states. Approximately 1,000 school superintendents and 1,400 secondary school principals will supervise 20,000 teachers who will collect the data.

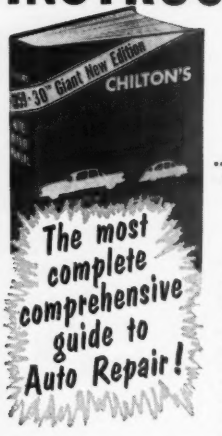
Details of the program known as *Project Talent* were announced February 16 at a meeting of the American Association of School Administrators in Atlantic City by the Director of the Project, Dr. John C. Flanagan.

The study will evaluate various types of local school programs and includes public, private and parochial schools in all types of urban and rural communities. How successful have they been in developing the aptitudes of their students? "We're interested not only in the progress made in the basic educational skills of reading, writing and arithmetic," he stated, "but in the various types of knowledge acquired both in and out of the classrooms."

Results obtained from this national census of aptitudes and abilities in relation to educational and career plans will be reported later this year.



here's better, faster
CAR SERVICE INSTRUCTION!



...from Chilton... world's leading automotive publishers

This latest, 5 lb. edition of Chilton's world famous AUTO REPAIR MANUAL with over 1,000 pages and 3,500 how-to-do-it illustrations paves the way for fast, accurate vocational instruction. Auto students and instructors alike treat this annual as their servicing "bible"—both for learning and later as a trustworthy on-the-job reference. Demonstrates clearly as A-B-C how to locate troubles and make prompt, proper repairs with standard tools. No other manual is as complete or as easy to use!

Revised Annually by Leading Automotive Authorities

Gives fast answers to problems on practically any part of any car model made by leading U.S. mfrs. for the past 10 years. Just look up the model and part you want to service. Illustrated step-by-step instructions make each procedure easy to understand. Covers transmissions, overdrives, brakes, ignition systems, generators, valves, fuel pumps, steering, distributors, clutches, and all the rest—everything from making a simple tune-up or adjustment to a complete overhaul.

Throughout, this giant manual is designed to simplify instruction—and is equally invaluable for actual working use.

Chilton SPECIALIZED Manuals

Chilton's AUTO ENGINE REBUILDING & MAINTENANCE: Almost anything that happens to engines can be fixed—and this 466-page manual explains the modern, *professional* procedures for doing it! Includes complete troubleshooting & repair details *plus* specific instructions for engine repair equipment. 470 illus.

Chilton's AUTO POWER ACCESSORIES: Gives detailed procedures for power brakes and steering; retractable & convertible tops; air suspension systems; windows; heaters—even air conditioning, etc. 235 pages, over 279 illus. Contains handy troubleshooting charts.

Chilton's AUTO ELECTRICAL SYSTEMS: 466 pages and more than 370 helpful pictures explain details of electrical system fundamentals and servicing.

25% DISCOUNT OFFER TO TEACHERS!

Dept. A-30, The Chilton Co.,
Book Division
56th & Chestnut Sts., Philadelphia 39, Pa.

Send for 10-day free examination copies of the following checked books. Within 10 days I will either remit the price of the book(s) kept, plus postage, or return them without obligation.

.....copies Chilton AUTO REPAIR MANUAL $7.95 less 25% discount
.....copies Chilton ENGINE REBUILDING & MAINTENANCE $7.95 less 25% discount
.....copies Chilton POWER ACCESSORIES $7.95 less 25% discount
.....copies AUTO ELECTRICAL SYSTEMS $7.95 less 25% discount

Name.....
School.....
Street.....
City, Zone, State.....

New Books

General Clerical Procedures, by John G. Kirk, Maurice L. Crawford and Mark H. Quay. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1959. 292 pages, $3.40.

This third edition is designed to give students training in duties of office clerical workers and to develop an insight into the future of the clerical worker in the world of automation. The many motivational exercises in this volume are correlated with clerical activities on the job.

* * *

Modern Farm Buildings, by Wallace Ashby, J. R. Dodge and C. R. Shedd. Prentice-Hall, Inc., Publishers, Englewood Cliffs, New Jersey, 1959. 390 pages, $5.50.

In simple terms, three authorities on farm housing give practical, helpful, up to date information, conforming to recommendations of the U. S. Department of Agriculture. This information with many illustrations will enable the farmer to decide the most useful type of building under a given set of requirements.

* * *

Ten Thousand Careers, by Robert L. Thorndike and Elizabeth Hagen. John Wiley and Sons, Inc., 440 Fourth Ave., New York 16, N. Y., 1959. 346 pages, $8.50.

This publication reports the outcomes of a study of 17,000 men who were given aptitude tests in 1943; in 1955 and 56 information was obtained from over 10,000 about the educational and vocational history of each with a rough measure of his success and satisfaction. The report is unique because of the size of the group, the comprehensiveness of the tests and the length of time involved.

* * *

The Diesel Engine, Its Theory, Basic Design and Economics, by L. V. Armstrong and J. B. Hartman. The MacMillan Co., 60 Fifth Ave., New York 11, N. Y., 1959. 360 pages, $8.75.

Reflecting extensive experience, this book is a comprehensive and logical treatment of the diesel engine. Petroleum, refining methods and the effect of forces released by combustion upon an engine's moving parts are discussed. There is a section on economics and at strategic points the author introduces basic design problems to point up practical values.

Effective Illustrations, Headline Design, 101 Usable Layouts, Double-Spreads, and Ken Butler's Layout Scrapbook, by Kenneth B. Butler. The Butler Clinic, West Washington Rd., Mendota, Illinois, 1956-1958. Approximately 90 pages each, $3.75 each or $18.75 for the series of five.

These profusely illustrated handbooks set forth innumerable layout ideas and instructions for brightening publications. The many photographs and designs offer help for effective styling of the printed page.

* * *

The Alive and Growing Teacher, by Clark E. Moustakas. Philosophical Library, Inc., 15 East 40th St., New York 16, N. Y., 1959. 157 pages, $3.00.

This work presents a theory of human relatedness, portraying persons living and learning together and telling what happens to persons free to be themselves. It is an account of a group of classroom teachers struggling with personal and professional issues and problems.

For top notch coverage of the latest in aid to education and student aid,

Subscribe to the Scholarships, Fellowships and Loans NEWS SERVICE.

$20/yr. Free sample copy of an issue if you refer to this ad on official stationery.

Bellman Publishing Co.
P. O. Box 172-V
Cambridge 38, Mass.

When in need of
PLASTICS
for Industrial Arts, Shop,
send for our 20 page catalog;
Plastic Products Co., of Utah
P.O. Box 1415
Salt Lake City 10, Utah

AUTHORS WANTED BY N. Y. PUBLISHER

Leading book publisher seeks manuscripts of all types: fiction, non-fiction, poetry, scholarly and religious works, etc. New authors welcomed. Send for *free* booklet D7. Vantage Press, 120 W. 31 St., New York 1.

NEW FOLDER— FREE FOR YOUR GUIDANCE FILE

"VOCATIONAL OPPORTUNITIES IN THE HOTEL AND INSTITUTIONAL FIELD"

The hotel and institutional fields offers unusual opportunities today to men and women, both young and mature. The Lewis School— original and only school offering both resident and home study hotel training courses has prepared a FREE folder for Guidance Officers giving full details about this fascinating field. Write on your letterhead to:

LEWIS HOTEL TRAINING SCHOOL
Vocational Guidance Div., Room FC-4904, Wash. 7, D. C.

NEW WOODCARVING SETS IN HANDY PLASTIC BAGS

Imported from Germany, made of finest steel by Experienced Craftsmen. Tools keep sharp, keen edge for life-long service.

SET No. 8 (ILLUS.)

Six sharpened Tools ready for honing plus high quality OIL STONE—Two CHIP CARVING KNIVES, SKEW CHISEL, No. 2 10 mm.—GOUGE No. 105 8 mm.—GOUGE 107 1 mm.—PARTING (V) TOOL NO. 106 6 mm. wide. Hardwood Octagon Handles. A real utility set.

COMPLETE SET as shown in Plastic Bag Only $9.20

Many other popular priced sets from $3.15
Send for 12 Page Folder

FRANK MITTERMEIER
Exclusive Importer
3577 E. Tremont Ave., New York 65, N. Y.